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REPORT

OF THE

MONETARY COMMISSION, 1898.

OF THE

INDIANAPOLIS CONVENTION

OF

BOARDS OF TRADE, CHAMBERS OF COMMERCE, COMMERCIAL CLUBS, AND OTHER SIMILAR BODIES OF THE UNITED STATES

CHICAGO
The University of Chicago Press
1898

For copies of this Report, address
H. H. Hanna, Indianapolis, Indiana

PREFATORY NOTE

To the Executive Committee of the
Indianapolis Monetary Convention:

The Commission, after completing its plan of monetary reform, entrusted to me the preparation of a Final Report, which, while furnishing the necessary history of our existing system, should more fully than the brief Preliminary Report give the grounds upon which the plan of the Commission was based. It goes without saying that no two persons would do this work in quite the same way; and in justice to other members of the Commission, it seems right that the public should know by whom the Report was prepared.

It has been my aim, however,—so far as possible in the too brief time allotted me and with the help of the Assistants to the Commission—not to prepare an exposition which represented merely my own point of view, but to marshal those facts and arguments which truly supported the conclusions of the Commission. No one, it should be added, can be more aware than I of the inevitable shortcomings of this attempt to do what would have been so much better done if it could have had the joint attention of all the members of the Commission.

J. Laurence Laughlin.

April 1898.

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INTRODUCTION

HISTORY OF THE MOVEMENT

On November 18, 1896, at the request of a number of business men, a member of the Indianapolis Board of Trade presented to its Board of Governors the following memorial, viz.:

Having been requested by a number of business men of the city to present the subject of reform of the currency to the Board of Trade, I feel that I stand as a representative of the business men of this city, whose experience is, in a general way, the experience of the business men of the entire country. The business man of the country is aroused to the necessity of different methods of demand for right things in legislation.

I stand to present to you the urgency and importance of an action on your part for which many thinking men of the country are now looking to you.

The sentiment is abroad in the land, the business men are discussing and the press is urging currency reform. As yet the ideas are only crude; there are as many plans as there are writers; but the agitation is continuous, and opinions are being framed that will soon take stubborn form and divide the people, and the politician will push them as important issues, and the business men will suffer by the disturbance and depression that are sure to follow. To avoid the drifting of these sentiments into wrong channels, it is of vital importance that, by conservative measures, they be led by safe, strong hands very early into the right path. The West will not take up this cause; the East should not do so, and the central West, by reason of its importance as a factor in the commerce of the country and its geographical relation to the other sections in which financial views are considered more or less extreme, should act. For such a movement to emanate from Indiana would probably be more acceptable to all parts of the country than for it to emanate from any other state. No movement could or should succeed that is not based upon the broadest possible justice and intelligence, and in the entire interest of the whole people.

Such investigation and framing should only be entrusted to those who are great enough to rise above all party relation and prejudice, to discard all former ideas when confronted with better methods, and fairly and honestly deal with the great question for the general good and for defense against the instability of values, which has caused such immeasurable losses to the people of this country within the few years just past. The business man is the victim of all such agitation, and I stand in his name to protest with all possible emphasis against further

risk by delay, lest the opportunity slip. President Cleveland very ably urges some action in his letter, read at the annual dinner of the New York Chamber of Commerce last night. Again, I say something will be done very soon, and it is just as likely to be wrong as right in the early or superficial discussion; and I present to you for action tonight a plan that cannot do harm and should lead up to stable things in commerce, and relief from the racking strains that the business man is periodically subjected to by reason of the agitator's continuous desire to change our financial system. I am thoroughly aroused to the correctness of the position and the vital importance of prompt or immediate action, and if you can agree with me, then the duty is plain, and I beg of you to forestall the menace of early superficial action by directing the minds of the people to a broader view of a great subject, by suggesting steps that will surely put into good, if not perfect, form, the financial methods of the country.

To this end I ask that you, as the representatives of the active business men of the whole country, act at once in the following manner: I ask you to appoint a committee with instructions to prepare a letter of address to the more important boards of trade in the states known as the central West, to wit.: the boards of trade in Louisville, Cincinnati, Columbus, Cleveland, Toledo, Detroit, Chicago, Milwaukee, St. Paul, Minneapolis, Des Moines, Kansas City, St. Louis, Omaha, Peoria, and Grand Rapids, requesting that the controlling boards of each of such boards of trade send delegations of not exceeding three members, the same being non-partisan in politics, to a conference to be held in Indianapolis, say Tuesday, December 1, at 11 o'clock A. M., for the purpose of considering the propriety of uniting in a call for a general or national convention of representatives of boards of trade and other commercial bodies, which shall in turn consider the propriety of organizing a representative commission of able, conservative, trustworthy men to thoroughly study, canvass, and consider, without limit or instructions, all conditions and all currency systems, the strength and weakness of our own, as well as the valuable features of all others, for the purpose of presenting to Congress for action these valuable features, united with such as may be of special importance for our special requirements, with the general approval of the boards of trade and commercial bodies of the country.

To continue the argument, it is fair to believe that such a carefully chosen commission will produce acceptable results to the general public. It is reasonable to believe that the call for a general convention being made in the name of the seventeen boards of trade mentioned, will command the respect necessary for recognition, attendance, and participation in the general convention, and a commission that has behind it the united approval of the commercial bodies and boards of trade of the country will be recognized and listened to by Congress. In other words, the manner of call and action is made for the purpose of not only offering the well-digested plan of men able to deal with

such matters, but to reinforce the demand by the support and influence of men who are not asking legislation for political purposes but for the general good of the whole people. If all this is favorably received by you, then preliminary steps cannot be too speedily taken in order to forestall the confusion incident to crudely conceived opinions that cannot be otherwise than harmful. Perfect results of commissions are perhaps not possible, but when the motive behind them is lofty, and above personal or selfish aims of the few, they commonly result better than other ways. When the Venezuelan Commission was established upon high principles of right in search for the truth upon which to base the final demand for justice, the fair and honorable method commanded the respect of our own people first, and the public excitement was relieved by confidence in a wise step, and it is evident that Great Britain was alive to the exalted spirit and dignified determination on the part of our government for the right, and there is but little doubt that the concession to arbitration in which the Monroe Doctrine was fully respected was brought about to some extent by the idea and work of this commission. So, too, our own people will be influenced more or less to patience and confidence in the outcome of such an effort as is proposed. The procedure will require much time at best, and should be begun at once.

In response to this appeal the Board of Governors adopted the following resolutions:

Resolved, By the Board of Trade of the City of Indianapolis, that the boards of trade of the cities of Chicago, St. Louis, Cincinnati, Louisville, Cleveland, Columbus, Toledo, Kansas City, Detroit, Milwaukee, St. Paul, Des Moines, Minneapolis, Grand Rapids, Peoria and Omaha be, and they are, invited to send three delegates each to a preliminary conference, to be held in the city of Indianapolis, on the first day of December, 1896, for the purpose of considering the advisability of calling a larger conference or convention, composed of delegates from the boards of trade and commercial organizations of the cities of the United States, to consider the propriety of creating a non-partisan commission, to which shall be assigned the duty of formulating a plan for the reform of our currency system, to be reported to a subsequent meeting of the conference or convention.

Resolved, That the president be authorized to appoint three delegates to the said conference.

Resolved, That the Commercial Club of the City of Indianapolis be also invited to send three delegates to the conference to be held December 1, 1896.

Resolved, That the Committee on Arrangements, with a similar committee to be appointed by the Commercial Club, shall have charge of the arrangements for the conference to be held December 1, and the proper entertainment of the attending delegates.

Copies of the same were sent to the boards of trade and other commercial organizations of the cities named, accompanied by a letter in which the Board said:

In behalf of the policy and purpose outlined by these resolutions, permit us to say that it is believed very earnestly that a non-partisan committee or commission composed of experts judiciously selected by a representative conference of business men should be chosen at an early day; and that to this commission should be assigned the duty of preparing a plan which can be embodied in such legislation as will place our monetary system on a permanently sound basis.

The present grave juncture presents an opportune occasion to the business men of the country to intervene in a business matter, and it is their duty as well as they can to aid in the solution of a matter which so intimately concerns the stability of business.

The commission to be ultimately selected must be of such attainments and character as not only to allay all suspicion of any influence from class or sectional interest, but it must be of such fitness as to inspire the confidence in the mind of the fair-minded citizen of the republic that its work will be done for the permanent welfare of the whole nation.

We have great confidence in the patriotism of the masses of the American people, and believe that they will recognize the wisdom of looking to a commission of the character above described for the best solution of the questions involved, and that the people will await the results of the committee's labor before committing themselves to any particular plan or scheme hastily or immaturely devised.

In view of the grave character of the situation which confronts us, and the great importance of the work to be achieved by the committee to be appointed, it is obvious that each commercial body, in choosing its representatives to the proposed conference, should nominate men whose attainments, experience, and character will satisfy the demands of the occasion.

To this conference delegates were in attendance from the following cities, viz., Cincinnati, Chicago, Cleveland, Columbus, Grand Rapids, Indianapolis, Louisville, Milwaukee, Minneapolis, St. Louis, St. Paul, and Toledo, who, after protracted discussion, issued the following "call for a Monetary Convention of business men:"

The representatives of the Board of Trade, of the Chamber of Commerce and similar commercial bodies of the cities of Chicago, St. Louis, Cincinnati, Milwaukee, Minneapolis, St. Paul, Louisville, Columbus, Cleveland, Toledo, Grand Rapids and Indianapolis, in conference assembled at the City of Indianapolis on the 1st day

of December, 1896, after due deliberation, do hereby call a non-partisan convention to meet at the city of Indianapolis, on the 12th day of January, 1897, to be composed of representative business men, chosen from boards of trade, chambers of commerce, commercial clubs or other similar commercial bodies, in cities of eight thousand or more inhabitants, according to the census of 1890, the basis of representation to be tabulated and in accordance with the population of said cities, for the purpose of considering and suggesting such legislation as may, in their judgment, be necessary to place the currency system of the country upon a sound and permanent basis. In behalf of this call, the conference submits that the fact that necessity for such legislation exists is generally conceded by business men.

It is the right and the duty of the business men of the nation, in a matter of such vital business concern, to render to this cause all the aid which their experience and knowledge can afford. These owe it to themselves, as citizens of the republic, and as a matter of business self-preservation, to participate actively, and, we believe, efficiently in this movement. The business men have been accused of neglect of political duties. In ordinary times there may be some foundation for this charge, but at every critical juncture in the history of our country, when the nation's prosperity, honor or general welfare was seriously in danger, they have, in the spirit of enlightened patriotism, risen to the full measure of their duty; and we believe that the painful experience of the country under the existing laws on the subject of the currency admonishes the business men that we have reached a point where it is their duty to take an active part in helping to solve the great questions involved.

And we have a right to believe that a convention composed of broadminded and enlightened business men, so earnest in the pursuit of truth that party considerations will be forgotten, convening in the spirit of enlightened patriotism, can and will do much in helping forward a wise and sound solution of the currency question.

We are also justified, in the light of the recent presidential election, in saying that the voters of the nation are opposed to any plan of currency reform involving the use of any money which will place in jeopardy the honor or the credit of our country.

Accepting these as conclusions from the recent manifestations of public opinion, we cordially and earnestly invite your organization to choose and send with proper credentials . . . . of your representative business men to the proposed convention. Please appoint only those who will attend, and report the names of your delegates as soon as practicable, to H. H. Hanna, Chairman of Executive Committee, Indianapolis, Indiana. Respectfully:

Cincinnati Chamber of Commerce, represented by M. E. Ingalls, Herman Goepper, W. Cooper Procter.

Chicago Board of Trade, represented by H. F. Dousman, B. A. Eckhart, P. B. Weare.

Cleveland Chamber of Commerce, represented by J. G. W. Cowles, E. A. Angell.

Columbus Board of Trade, represented by Joseph H. Outhwaite, William Burdell, Charles H. Linderberg.

Grand Rapids Board of Trade, represented by N. A. Fletcher, William H. Anderson.

Indianapolis Board of Trade, represented by H. H. Hanna, E. B. Martindale, George G. Tanner.

Indianapolis Commercial Club, represented by John T. Brush, Louis Hollweg, Herman Lieber.

Louisville Board of Trade, represented by Augustus E. Willson.

Milwaukee Chamber of Commerce, represented by F. H. Madgeburg, H. L. Palmer.

Minneapolis Board of Trade, represented by T. B. Walker, Joseph U. Barnes, Henry Hill.

St. Louis Merchants' Exchange, represented by E. O. Stanard, Clark H. Sampson, James Campbell.

St. Paul Chamber of Commerce, represented by E. V. Smalley.

Toledo Produce Exchange, represented by Denison B. Smith.

On January 12, 1897, the Convention assembled. Twenty-six states and the District of Columbia sent delegates. More than one hundred cities were represented by their leading and representative business men. In all there were about three hundred registered members of the Convention.

The session lasted two days, during which free and full discussion was had, and, as an expression of the will of the Convention, the following resolutions were, with the exception of three votes, unanimously agreed upon, viz.:

This convention declares that it has become absolutely necessary that a consistent, straightforward, and deliberately planned monetary system shall be inaugurated, the fundamental basis of which should be: First, that the present gold standard should be maintained; second, that steps should be taken to insure the ultimate retirement of all classes of United States notes by a gradual and steady process, and so as to avoid injurious contraction of the currency, or disturbance of the business interests of the country, and that until such retirement provision should be made for a separation of the revenue and note-issue departments of the Treasury; third, that a banking system be provided which should furnish credit facilities to every portion of the country and a safe and elastic circulation, and especially with a view of securing such a distribution of the loanable capital of the country as will tend to equalize the rates of interest in all parts thereof. For the purpose of effectively promoting the above objects;

Resolved, That fifteen members of this convention be appointed by the chairman to act as an Executive Committee while this convention is not in session, with full powers of this convention. The Executive Committee shall have the power to increase its membership to any number not exceeding forty-five, and five members thereof shall at all times constitute a quorum of said committee.

The Executive Committee shall have special charge of the solicitation, receipt, and disbursement of contributions voluntarily made for all purposes; shall have power to call this convention together again when and where it may seem best to said committee to do so, and said committee shall continue in office, with power to fill vacancies, until discharged at a future meeting of this convention.

Resolved, That it shall be the duty of this Executive Committee to endeavor to procure at the special session of Congress, which it is understood will be called in March next, legislation calling for the appointment of a Monetary Commission by the president to consider the entire question, and to report to Congress at the earliest day possible.

Or, failing to secure the above legislation, they are hereby authorized and empowered to select a commission of eleven members, according to the rules and plans set forth in the suggestions submitted to the convention by Mr. Hanna, of Indianapolis, as follows:

ARTICLE 1. The Commission shall consist of eleven members to be named by the Executive Committee appointed by this convention. The Executive Committee shall have power to fill vacancies in the Commission as they may occur.

ART. 2. The first meeting of the Commission shall be held at a time and place to be designated by the Executive Committee of this convention in a call to be issued therefor, and at such meeting the Commission shall organize by the election of such officers and the adoption of such rules and by-laws for its own government as may be agreed by a majority of its members, and thereafter it shall be governed by such rules and by-laws subjects to these articles.

ART. 3. All rules and by-laws of the Commission, and all its proceedings, shall be directed towards the accomplishment of the objects of its creation, which is to make a thorough investigation of the monetary affairs and needs of this country, in all relations and aspects, and to make appropriate suggestions as to any evils found to exist and the remedies therefor, and no limit is placed upon the scope of such inquiry, or the manner of conducting the same, excepting only that the expenses thereof shall not exceed the sum set apart for such purpose by the Executive Committee.

ART. 4. The Executive Committee of this convention shall use so much of the voluntary contributions made to it as may be available for that purpose, to defray all necessary expenses of the Commission, and shall notify the Commission from time to time of the amount so available, in order that it may regulate its expenditures accordingly, and no

liability shall attach to said committee or to this convention beyond the amount so notified.

ART. 5. When the labors of this Commission have been completed as far as practicable, the Executive Committee, if it deem it advisable, shall issue a call to bring this convention together again at a time and place designated in such call, and at the meeting so convened the Commission shall make report of its doings and suggestions in such manner and form as it shall deem best adapted to present the same to this convention and its members for action, and, if legislation is deemed advisable, shall accompany such report with a draft of such bill or bills providing for such legislation.

Resolved, That all resolutions and communications as to methods of currency reform which have been presented to this convention be referred to such Commission when formed.

Pursuant to this expressed will of the Convention, the Hon. C. Stuart Patterson of Philadelphia, President of the Convention, appointed for an Executive Committee, the following, viz.:

H. H. Hanna, Indianapolis, Ind., Chairman.
M. L. Crawford, Dallas, Texas.
W. B. Dean, St. Paul, Minn.
J. W. Fries, Salem, N. C.
J. F. Hanson, Macon, Ga.
C. C. Harrison, Philadelphia, Pa.
Rowland Hazard, Peace Dale, R. I.
J. P. Irish, San Francisco, Cal.
H. H. Kohlsaat, Chicago, Ill.
J. J. Mitchell, Chicago, Ill.
A. E. Orr, New York, N. Y.
G. F. Peabody, New York, N. Y.
T. C. Power, Helena, Mont.
E. O. Stanard, St. Louis, Mo.
A. E. Willson, Louisville, Ky.

Subsequently, in accordance with the authority conferred by the resolution under which it was appointed, the Executive Committee added to its numbers the following:

Henry C. Payne, Milwaukee, Wis.
W. R. Trigg, Richmond, Va.
E. B. Stahlman, Nashville, Tenn.
Eugene Levering, Baltimore, Md.
Chas. C. Jackson, Boston, Mass.

Samuel Hill, Minneapolis, Minn.
John B. Henderson, Washington, D. C.
N. A. Fletcher, Grand Rapids, Mich.
W. C. Cornwell, Buffalo, N. Y.

Following the instructions of the Convention, the Executive Committee selected a Commission composed of George F. Edmunds of Vermont, Charles S. Fairchild of New York, C. Stuart Patterson of Pennsylvania, John W. Fries of North Carolina, Thomas G. Bush of Alabama, George E. Leighton of Missouri, Stuyvesant Fish of New York, William B. Dean of Minnesota, Robert S. Taylor of Indiana, J. Laurence Laughlin of Illinois, and Louis A. Garnett of California.

The Commission thus appointed held its first meeting September 22, 1897, at 3 p.m., in Washington, D. C., and organized by electing George F. Edmunds chairman and George E. Leighton vice chairman. At the same time L. Carroll Root and H. Parker Willis were selected as Assistants to the Commission. Committees were appointed as follows:

Metallic currency	Banking system	Demand obligations of the government
Mr. Patterson	Mr. Fairchild	Mr. Taylor
Mr. Garnett	Mr. Bush	Mr. Fish
Mr. Laughlin	Mr. Dean	Mr. Fries
	Mr. Laughlin	Mr. Edmunds
	Mr. Leighton	

Sessions were subsequently held daily until September 29, when an adjournment until October 11 was taken.

At the meeting of Wednesday, September 29, the following set of interrogatories was adopted and ordered printed, together with a circular letter signed by the Chairman, and supplied to the members of the Commission, to be sent to such experts as they might think fit.

METALLIC CURRENCY.

1. Should or should not the silver dollars and silver certificates be redeemed on demand in gold? If redeemed, what reserve should be provided, and how?

2. What in your judgment would be the probable amount of silver dollars and silver certificates presented, if direct redemption were enacted?

3. To insure the permanent inviolability of the gold standard, what legislative measures would you recommend?

4. For the purpose of facilitating the use of existing silver currency, what do you recommend as the smallest denomination of United States notes and bank notes which should be put into circulation?

DEMAND OBLIGATIONS.

1. Do you consider that there are any dangers arising from allowing the United States notes to remain as a permanent part of our circulation?

2. On what grounds, if any, would you favor the gradual but entire withdrawal of the Treasury notes of 1890 and of the United States notes?

3. If it shall be decided to retire the United States notes, how can it be done without adding to our bonded debt?

4. How, in that case, can provision be made for maintaining an adequate amount of currency available for purposes of business?

5. If it be thought inexpedient to fund the United States notes, how can they be redeemed with an assurance that bank currency will take their place?

6. Meanwhile, what security or gold reserves would you recommend?

7. In case provision should be made for the retirement of United States notes, how could their presentation for redemption be best secured?

8. Should Government issues be withdrawn only as bank notes are put out? That is, if an elastic system of bank issues should be adopted, would it be desirable to define and maintain any given quantity of circulation?

9. Would the banks in fact furnish the currency which the country needs, if the Government notes were withdrawn?

BANKING.

1. Is it possible to rely upon national bonds as security for bank note issues?

2. Can any safe and practicable plan be devised for using any other security as a basis for bank note issues?

3. If bonds should be used exclusively as a basis for issues, would it be possible thereby to secure an elastic note circulation?

4. If bank note issues be based exclusively on assets of the bank, is the nature and extent of the security such as effectually to protect the note holder? What limit should be set to such note issues?

5. Since bank assets (including stockholders' liabilities, etc.), must be the means of ultimate redemption of such issues, what funds would you deem necessary to be held as a cash reserve for the immediate redemption of the notes; and in what form; and in whose hands?

6. In case of notes based on bank assets, what means can you suggest to obtain and preserve a high character of discounts?

7. Can any watchfulness of other banks connected by locality or business connections be brought to bear on a bank to prevent bad banking? Can such a scheme be devised as in cities where Clearing House Associations detect and punish weakness, by which country banks can be guarded?

8. What plan of examination and inspection would you recommend?

9. What methods would you suggest by which uniformity of note issues based on assets could be secured throughout the country? If by redemption, state where and how?

10. What, if anything, beyond provision for immediate redemption is needed for securing the elasticity of note issues in periods of normal business?

11. In times of panic or sudden stringency, how would you provide for additional issues by the banks to enable them to continue discounts and prevent commercial distress?

12. Of what should the bank reserves consist?

13. Should any National bank be permitted to pay interest on the current deposits of other banks?

14. Should deposits of country banks in reserve cities be authorized to be counted as a part of the required reserve?

15. What should be the minimum limit of capital for National banks?

16. Should the existing ten per cent. tax on State bank notes be repealed?

17. Should any National bank be permitted to establish branches under its single management? If so, under what limitations, if any?

18. Should branch banks be obliged to redeem the notes of the parent bank and of other branches?

19. Should branch banks be required to maintain any specified proportion of reserves to liabilities, independent of regulations for the general accounts of the parent bank?

On October 11, the Commission reconvened and sessions were held daily until October 22, when an adjournment was taken to Wednesday, November 3. Sessions were held daily from November 3 to November 13, an adjournment being then taken to November 17. Upon reconvening on November 17, the Commission continued in session during the 18th and 19th, and

took an adjournment to December 15, reconvening on that date and continuing in session during December 16 and 17, adjourning upon the latter date *sine die*.

At the session of Friday, December 17, a preliminary report, stating the results of its labors, was adopted by the Commission. This was given to the public on January 3, 1898.[1] A few days later, a bill embodying the recommendations of the report[2] was introduced in the House of Representatives by Representative Overstreet of Indiana. On January 12, the Committee on Banking and Currency listened to arguments in defense of the measure from Senator Edmunds and Messrs. Fairchild, Taylor, Fries, and Bush.

The Indianapolis Monetary Convention was reconvened January 25, 1898. At this session, the Executive Committee made the following report:

In accordance with the general resolutions adopted in the last convention, President Patterson appointed an Executive Committee of fifteen members, charging it to act for the convention when not in session and to execute the will of the convention as expressed in the general resolutions.

Faithful to its trust, the Committee assembled in Washington and presented its plan to the Administration. An appeal was made to the Congress seeking authority for the President to appoint a Congressional Commission to consider the entire subject of our financial organization and make recommendation for improvement therein.

President McKinley sent a special message to Congress in support of your Committee's appeal, and the members of the Committee are pleased, in justice to the President, to report that the President's support was full, earnest, and steadfast, of the Committee's effort to secure legislation for the establishment of a Congressional Commission.

Representative C. W. Stone, of Pennsylvania, introduced a bill into the House in response to the President's message, which was passed, but the measure was not successful in the Senate. Congress adjourning without action, the Executive Committee proceeded further in its prescribed duty and chose a Commission of eleven members to make a thorough investigation of the monetary affairs and needs of the country in all relations and aspects, and to make appropriate suggestions as to any evils found to exist and the remedies therefor.

The members of the Commission, at great sacrifice of their time and at serious loss to their private business affairs, patriotically and faithfully labored to accomplish the task imposed upon them.

[1] See pp. 20–59. [2] See pp. 59–74.

The Executive Committee is pleased to report to the Convention that the Commission has concluded its labor and submitted a report and plan, together with a memorandum bill, which embodies the recommendations suggested in its plan.

Congressman Overstreet, of Indiana, has introduced into Congress in substance the bill recommended by the Commission, and it has been referred to the Committee on Banking and Currency for investigation and report.

Copies of the report of the Commission, its memorandum bill, the bill introduced by Congressman Overstreet, and the report of the first meeting, can be found in the chairs.

The members of the Executive Committee desire to express their deep sense of gratitude for the unlimited encouragement and support they have received at the hands of their fellow delegates in the convention and at the hands of the general public, and now that the duties delegated to them have been performed, pray that they be further instructed or discharged from service.

The Committee on Resolutions presented, and the delegates in convention, without dissent, adopted, the following resolutions, endorsing the report and plan of the Commission:

Resolved, That this Convention recognizes its obligations to the Executive Committee selected under the resolutions of January 15, 1897, for the thorough and able manner in which they have discharged the duties devolved upon them by those resolutions.

They deserve the highest commendation for their determined effort to obtain an Act of Congress providing for the selection of a Monetary Commission, to which the duty should be entrusted of devising the best means of securing a wise and stable currency system through legislative enactment.

As the Congress did not adopt a law for the appointment of such a Commission, the Executive Committee, in pursuance of the authority conferred by the Convention, proceeded to make such a selection, consisting of men from different sections of the country, and from different walks in life, who were well fitted by their ability, their experience, and their high character, to deal with this most important subject.

The Convention recognizes with gratification the wise and able manner in which the Monetary Commission have dealt with the subject, and find in their work the elements of a system calculated to be of inestimable benefit to the country.

We most cordially approve of the plan of currency reform submitted by the Monetary Commission, in the belief that if enacted into law it would accomplish, as far as possible, the results contemplated by the Commission, as set out in the following propositions:

1. To remove, at once and forever, all doubt as to what the standard of value in the United States is, and is to be.

2. To establish the credit of the United States at the highest point among the nations of the world.

3. To eliminate from our currency system those features which reason and experience show to be elements of weakness and danger.

4. To provide a paper currency convertible into gold and equal to it in value at all times and places, in which, with a volume adequate to the general and usual needs of business, there shall be combined a quality of growth and elasticity, through which it will adjust itself automatically and promptly to all variations of demand, whether sudden or gradual; and which shall distribute itself throughout the country as the wants of different sections may require.

5. To so utilize the existing silver dollars as to maintain their parity with gold without imposing undue burdens on the Treasury.

6. To avoid any injurious contraction of the currency.

7. To avoid the issue of interest-bearing bonds, except in case of an unlooked-for emergency; but to confer the power to issue bonds when necessary for the preservation of the credit of the government.

8. To accomplish these ends by a plan which would lead from our present confused and uncertain situation by gradual and progressive steps, without shock or violent change, to a monetary system which will be thoroughly safe and good, and capable of growth to any extent that the country may require.

These declarations, and the plan which follows, are honest in purpose; they are sound in business principle; they are adapted to the needs and wants of the whole people; they are wisely safeguarded against undue contraction of the currency on the one hand, or its perilous expansion on the other. We believe their enactment into law would stimulate hopefulness, inspire confidence, and conduce to a sense of safety that would be the forerunner of unexampled national growth and prosperity.

Approving of the expressed purposes of the Commission, and of its plan, we do most earnestly and cordially commend it to our fellow-citizens as worthy of their approval and adoption, and we urge upon the Congress of the United States that the principles embodied by the Commission in their report should be enacted into law, with the belief and expectation that the effect would be to secure a solid, substantial, and stable financial system that would redound to the credit of the country and insure a state of prosperity that cannot be achieved unless there is a system of finance the integrity and adaptability of which cannot be questioned or gainsaid.

That in the opinion of this Convention it is the duty of every citizen to urge upon his representative in Congress the adoption of such legal enactments as will carry into effect the recommendations of the Monetary Commission.

Existing conditions are propitious for effort in the direction of currency reform. General and able discussion has induced earnest and sober thought and turned the minds of men from fallacies and

delusions to that which was sound and wholesome. The high prices of many of our agricultural and manufacturing products, the inflowing of gold, and the improvement in business have gone far toward allaying that feeling of discontent and unrest which was so disturbing and so full of menace but a short time ago. Never before has public sentiment been in so healthy a state upon this subject as is now becoming generally prevalent.

The time has now come when the prospects for the establishment of the gold standard upon a firm and enduring basis are brightening and encouraging. The people want a note currency which shall be as good as gold. This movement proposes to bring about that result.

The people want "a volume of currency adequate to the general and usual needs of business" "with a quality of growth and elasticity through which it will adjust itself automatically and promptly to all variations of demand, whether sudden or gradual."

These ends are not only within the scope of what is contemplated, but are the direct objects intended to be gained by the plan of the Monetary Commission.

The people of the Western and Southern states wish the note issues so distributed that the scarcity of currency will no longer hamper and distress them in their business operations.

A method is proposed whereby their wants can be supplied, and their just demands can be complied with.

We appeal to them—we appeal to all patriotic citizens to unite with us in an earnest and determined effort to secure from Congress such legislation as will wisely but surely eventuate in bringing about sound financial methods, and in building up and establishing confidence, security, and safety in business transactions and in the ownership and value of property.

That the Executive Committee be continued, with power and authority to add to their number and to fill any vacancies which may occur, and also with power and authority to adopt such measures for procuring the needed legislation from Congress as they, in their judgment, may deem advisable and expedient.

The Executive Committee offered, and the delegates unanimously adopted, the following expression appreciative of the services of the Commissioners:

This resolution of the Indianapolis Monetary Convention, of January 1898, of representatives of the business men and business interests of the United States, chosen by the Boards of Trade and other representative commercial organizations, makes this public testimony and record of the very earnest appreciation and gratitude, which all the business men whom we represent, and this Convention and each of its members feel, and by this resolution witness, to Hon. George F. Edmunds, George E. Leighton, T. G. Bush, W. B. Dean, Charles S.

Fairchild, Stuyvesant Fish, J. W. Fries, Louis A. Garnett, J. Laurence Laughlin, C. Stuart Patterson, and Robert S. Taylor, members of the Monetary Commission chosen under the resolution of the Indianapolis Convention of 1897, for the splendid usefulness to our country and to mankind of their report upon the conditions, faults, and dangers, of our present laws, regulations and customs governing the currency, banking, and standard of value of the United States of America, and their plan for the changes recommended. They have given to their country, without any compensation or reward, except the consciousness of duty well and faithfully done, many months of arduous and priceless work, investigation, thought and study, at great sacrifice by each of them, in absence from home and invaluable time needed for their own serious and important duties, and we declare our earnest conviction that there has never been in the history of our country a body of men more truly representative of all that is best in American life, manhood, patriotism, and intelligence, nor one that undertook, and fulfilled a great task for the general welfare in a spirit of more unselfish devotion to our country.

Their report and plan which so fully cover the wide and complicated field of the duties entrusted to them is such a model of brevity, clearness, wisdom, and practical common sense, and is so rich in great, wise and just recommendation, rising so far above all personal preferences, limitations and theories in the wide scope of its beneficent plans and purposes, that we feel it due to all whom we represent and to ourselves, even as it is to them, to make this public acknowledgment of our profound appreciation and never ceasing gratitude.

Resolved, That a copy of this resolution, suitably engrossed and bound, be sent to each member of the Commission, as a token of this Convention's sense of their country's great debt to them and to each of them.

The Commission wish to record here their high appreciation of the intelligent services of the Assistants to the Commission, Messrs. L. Carroll Root and H. Parker Willis, in the preparation of this Report.

PRELIMINARY REPORT

THE MONETARY COMMISSION

OF THE

INDIANAPOLIS CONVENTION

OF THE BOARDS OF TRADE, CHAMBERS OF COMMERCE, COMMERCIAL CLUBS, AND OTHER SIMILAR COMMERCIAL BODIES OF THE UNITED STATES.

GEORGE F. EDMUNDS, VERMONT, *Chairman.*

GEORGE E. LEIGHTON, MISSOURI, *Vice-Chairman.*

T. G. BUSH, ALABAMA.

W. B. DEAN, MINNESOTA.

CHARLES S. FAIRCHILD, NEW YORK.

STUYVESANT FISH, NEW YORK.

J. W. FRIES, NORTH CAROLINA.

LOUIS A. GARNETT, CALIFORNIA.

J. LAURENCE LAUGHLIN, ILLINOIS.

C. STUART PATTERSON, PENNSYLVANIA.

ROBERT S. TAYLOR, INDIANA.

L. CARROLL ROOT, } *Assistants to the Commission.*
H. PARKER WILLIS, }

PRELIMINARY REPORT

To the Executive Committee of the
Indianapolis Monetary Convention:

The Commission appointed by you under the resolutions adopted by the Indianapolis Monetary Convention on 15th January, 1897, with a request "to make a thorough investigation of the monetary affairs and needs of the country in all relations and aspects, and to make proper suggestions as to the evils found to exist and the remedies therefor," respectfully reports that the members thereof met at Washington on the 22d day of September, 1897, and organized by the election of George F. Edmunds, as chairman, and George E. Leighton, as vice chairman.

The resolutions adopted by the Indianapolis Monetary Convention declare "that it has become absolutely necessary that a consistent, straightforward, and deliberately-planned monetary system shall be inaugurated, the fundamental basis of which should be: first, that the present gold standard should be maintained; second, that steps should be taken to insure the ultimate retirement of all classes of United States notes by a gradual and steady process, and so as to avoid injurious contraction of the currency or disturbance of the business interests of the country, and that until such retirement provision should be made for a separation of the revenue and note-issue departments of the treasury; third, that a banking system be provided which should furnish credit facilities to every portion of the country and a safe and elastic circulation, and especially with a view of securing such a distribution of the loanable capital of the country as will tend to equalize the rates of interest in all parts thereof."

We have accepted those principles as the basis of our action, not only because they are the instructions of the body of citizens

by whom we have been appointed, but also because they meet the approval of our judgment.

We have also sought and received the counsel of many of our fellow citizens in all parts of the country. Their communications, while differing in some respects, have, upon the more important points, presented a concurrence of opinion which has been an invaluable aid in the formation of our conclusions.

We submit, for the reasons hereinafter stated, a plan of currency reform, in the hope that it will, if enacted into law, accomplish, so far as possible, these results:

1. To remove, at once and forever, all doubt as to what the standard of value in the United States is, and is to be.

2. To establish the credit of the United States at the highest point among the nations of the world.

3. To eliminate from our currency system those features which reason and experience show to be elements of weakness and danger.

4. To provide a paper currency convertible into gold and equal to it in value at all times and places, in which, with a volume adequate to the general and usual needs of business, there shall be combined a quality of growth and elasticity, through which it will adjust itself automatically and promptly to all variations of demand, whether sudden or gradual; and which shall distribute itself throughout the country as the wants of different sections may require.

5. To so utilize the existing silver dollars as to maintain their parity with gold without imposing undue burdens on the Treasury.

6. To avoid any injurious contraction of the currency.

7. To avoid the issue of interest-bearing bonds, except in case of unlooked-for emergency; but to confer the power to issue bonds when necessary for the preservation of the credit of the government.

8. To accomplish these ends by a plan which would lead from our present confused and uncertain situation by gradual and progressive steps, without shock or violent change, to a

monetary system which will be thoroughly safe and good, and capable of growth to any extent that the country may require.

We cannot, within the limits of this preliminary report, go at length into the reasons which have led us to all the conclusions here expressed. A statement of those which relate to the more important points must suffice. Later a fuller and final report will be presented.

THE FACTS AS TO THE CURRENCY.

The people of the United States have ten different forms of currency: gold coins, silver dollars, subsidiary silver coins, minor coins, gold certificates, silver certificates, United States notes, currency certificates, Treasury notes of 1890, and national bank notes. The respective qualities of each, the amounts outstanding, the amounts in the Treasury, the amounts in circulation, and the respective denominations of the paper currency, were, on 1st November, 1897, as follows:

1. GOLD COINS of the denominations of $20, $10, $5, and $2.50, weighing 25.8 grains to the dollar and .900 fine. They are a " legal tender in all payments at their nominal value when not below the standard weight and limit of tolerance provided by law for the single piece, and when reduced in weight below such standard and tolerance, a legal tender at valuation in proportion to their actual weight;" receivable for all public dues, and formerly exchangeable for gold certificates. Gold bullion is admitted to free coinage. The Treasury estimates that the stock of gold in the country is $729,661,110, of which $153,573,148 (in addition to $36,814,109 held against outstanding gold certificates) are held by the Treasurer, and $195,895,107 are held by the national banks.

2. ~~STANDARD SILVER DOLLARS~~, each containing 412.5 grains of standard silver .900 fine, coined for government account, a "legal tender at their nominal value for all debts and dues, public and private, except where otherwise expressly stipulated in the contract;" receivable for all governmental dues, and exchangeable for silver certificates.

From 1793 to 1873, the Mint coined silver dollars to the

amount of $8,031,238. From 1874 to 1878, none were coined. The act of 28th February, 1878, required not less than two million nor more than four million dollars worth of bullion to be purchased monthly and coined into standard silver dollars.

The act of 7th August, 1882, directs the Secretary of the Treasury "to transport, free of charge, silver coins when requested to do so, provided that an equal amount in coin or currency shall have been deposited in the Treasury by the applicant."

The act passed on 19th February, 1887, which became a law without President Cleveland's approval, on 3d March, 1887, directed that "trade dollars" received at the Treasury should be coined into standard dollars. The act of 14th July, 1890, required four million five hundred thousand ounces of fine silver bullion to be purchased monthly and Treasury notes to be issued in payment therefor. The act of 1st November, 1893, repealed the purchasing clause of the act of 14th July, 1890.

Under the act of 28th February, 1878, the government purchased 291,272,018 ounces of silver at a cost of $308,279,260. Under the act of 14th July, 1890, the government purchased 168,674,682 ounces at an average price per fine ounce of $0.9244, costing $155,931,002. The government coined to the 1st of November, 1897, $452,713,792, of which $392,715,014 are in the Treasury, and $60,196,778 are in circulation. The free transportation of the silver dollar has cost $1,064,106. The government now holds 115,361,079.54 ounces of silver bullion, which cost $104,853,851.55, and which, at the price of silver on 3d November, 1897, are worth $65,900,016.67. As against the 392,517,014 silver dollars now in the Treasury there are outstanding silver certificates to the amount of $372,838,919, leaving $19,678,095 in the Treasury uncovered by certificates.

As the silver bullion now in the Treasury and purchased under the act of 1890 cost $103,957,026.25, and there are outstanding Treasury notes of 1890 to the amount of $109,313,280, silver dollars to the amount of $5,356,254 must be held as against these Treasury notes of 1890, and this amount deducted from the amount of silver dollars uncovered by silver certificates

($19,678,095) leaves as the amount of silver dollars uncovered by either silver certificates or Treasury notes of 1890, and subject to disposal by the Treasury, $14,321,841. The act of 14th July, 1890, declared it to be "the established policy of the United States to maintain the two metals on a parity with each other upon the present legal ratio, or such ratio as may be provided by law." The act of 1st November, 1893, declared it "to be the policy of the United States to continue the use of both gold and silver as standard money and to coin both gold and silver into money of equal intrinsic and exchangeable value, such equality to be secured through international agreement, or by such safeguards of legislation as will insure the maintenance of the parity in value of the coins of the two metals, and the equal power of every dollar at all times in the markets and in the payment of debts."

3. SUBSIDIARY SILVER, coined for government account in denominations of 50, 25, and 10 cents, .900 fine, containing 385.8 grains[1] to the dollar; "a legal tender in all sums not exceeding $10 in full payment of all dues, public and private;" receivable for governmental dues to $10; and exchangeable for lawful money at the office of the Treasurer or any Assistant Treasurer of the United States in sums of $20 or any multiple thereof. The general stock of subsidiary silver amounts to $75,414,007, of which $11,981,078 are in the Treasury, and $63,432,929 are in circulation.

4. MINOR COINS, coined on government account in denominations of 5 cents and 1 cent; a "legal tender at their nominal value for any amount not exceeding 25 cents in any one payment;" receivable to the amount of 25 cents for all governmental dues; and redeemable in lawful money at the office of the Treasurer and the several Assistant Treasurers and depositories of the United States when presented in sums of not less than $20.

5. GOLD CERTIFICATES, issued under the acts of March 3, 1863, and July 12, 1882, for gold coin deposited in the Treasury, in denominations of $10,000, $5000, $1000, $500, $100, $50,

[1] 25 grams.

and $20; not a legal tender; "receivable for customs, taxes, and all public dues," and redeemable in gold at the Treasury or any sub-treasury.

Certificates to the amount of $38,348,169 are outstanding, of which $1,534,060 are in the Treasury, and $36,814,109 are in circulation.

6. Silver Certificates, issued against standard silver dollars deposited, in denominations of $1000, $500, $100, $50, $20, $5, $2 and $1; not a legal tender; receivable for customs, taxes, and all public dues; exchangeable for standard silver dollars (or smaller coin); and redeemable in standard silver dollars. There are outstanding silver certificates to the amount of $384,170,504, of which $11,331,585 are in the Treasury and $372,838,919 are in circulation.

7. Treasury Notes, issued under the act of July 14, 1890, in payment for silver bullion; a "legal tender for all debts public and private, except where otherwise expressly stipulated in the contract;" receivable for customs, taxes, and all public dues and "redeemable on demand in coin" at the office of the Treasurer or any Assistant Treasurer of the United States. There have been issued $155,931,002, of which $46,617,722 have been redeemed in silver and canceled; $7,553,325 are in the Treasury and $101,759,955 are in circulation.

8. United States Notes, issued under the acts of February 25, 1862, July 11, 1862, and March 3, 1863, in denominations of $1, $2, $5, $10, $20, $50, $100, $500, $1000, $5000, and $10,000; a "legal tender in payment of all debts, public and private, within the United States, except for duties on imports and interest on the public debt;" redeemed when presented since 1st January, 1879, in gold coin at the subtreasuries in New York and San Francisco, and reissued. The highest amount of these notes outstanding at any time was on January 3, 1864, when it reached $449,338,902. By the Public Credit Act of March 18, 1869, "the United States solemnly pledges its faith to make provision at the earliest practicable period for the redemption of the United States notes in coin." The Resumption Act of January 14, 1875, authorized the use of surplus

revenues and the issue of bonds for their redemption. The act of May 31, 1878, prohibited their further cancellation or retirement, and directed the reissue of such as might be received or redeemed by the Treasury. The amount outstanding has therefore since remained at $346,681,016, of which $87,684,018 are in the Treasury, $48,625,000 of these being held against outstanding currency certificates, and $258,996,998 are in circulation.

The aggregate amount outstanding of United States notes, Treasury notes of 1890, and silver dollars is $908,708,088, of which $61,274,184 are now in the Treasury, but liable to reissue,[1] and $842,077,650 are in circulation.

As against this large amount of that which is a credit currency, aside from the value of the silver bullion and dollars in the Treasury, the Treasury now holds $153,573,148 in gold coin and bullion, after deducting the amount of the gold certificates.

9. Currency Certificates, issued under the act of June 8, 1872, in denominations of $10,000, upon deposit of United States notes, payable to order, and not a legal tender, nor receivable in exchange for anything other than legal-tender notes. $48,625,000 are outstanding, of which $340,000 are in the Treasury, and $48,285,000 are in circulation.

10. National Bank Notes, issued by the national banks of the United States in accordance with the act of June 3, 1864, to the extent of 90 per cent. of the par of government bonds deposited by such banks with the Treasury ; not a legal tender ; receivable at par "in all parts of the United States in payment cf taxes, excises, public lands and all other dues to the United States except duties on imports; and also for all salaries and other debts and demands owing by the United States to individuals, corporations, and associations within the United States, except interest on the public debt and in redemption of the national currency ;" receivable also by every national banking association for any debt or liability to it, and redeemable at the Treasury.

The national bank notes outstanding are $230,132,275, of

[1] Silver dollars to the amount of $5,356,254 are also in the Treasury, to be issued only upon the redemption and cancellation of an equal amount of Treasury notes.

which $4,998,012 are in the Treasury, and $225,134,263 are in circulation.

The national banks were organized under the act of 25th February, 1863, and its supplements. They were authorized to issue a circulation based upon bonds, in order that there might thereby be created a demand for the bonds of the United States.

On 2d July, 1866, there were 1634 banks; on 26th December, 1873, 1976; on 2d October, 1890, 3540; on 9th December, 1892, 3773, and on 5th October, 1897, 3610. The maximum capital was $689,698,017 on 9th December, 1892. The maximum circulation was on 26th December, 1873, $341,320,256, and the minimum circulation on 2d October, 1890, $122,928,084. Up to 1892, the tendency was towards increase of capital. Since then the tendency has been in the direction of a decreasing capitalization. From 1873 to 1890, there was a marked decrease in circulation, with occasional fluctuations; but since 1890 there has been some increase of circulation, with no prospect of any material increase under the existing system.

On 5th October, 1897, there were 3610 banks, with an outstanding note issue of $230,132,275 (of which $4,998,012 were held in the Treasury), with a capital stock of $631,488,095, with an aggregate capital, surplus, and undivided profits of $966,-240,095, with deposits of $1,869,491,310, and with investments in discounted paper (rediscounts deducted) of $2,043,803,392, in United States bonds of $277,235,920, in other stocks and securities of $208,831,563, and in lawful money of $388,882,631, of which $195,895,107 are in gold coin. The 5 per cent. redemption fund held by the Treasury now amounts to $10,021,-689. From the organization of the system, in 1863, to 30th June, 1897, the national banks have paid in taxes to the United States $150,207,339.44; and the United States has also made a profit of $2,826,466 from that amount paid by the banks to redeem circulation which has not been presented.

THE DEFECTS OF THE SYSTEM.

The defects of the existing system are:

First. The vast amount of government credit currency with-

out a certain and adequate provision for its redemption, and the consequent diminution of public confidence in the continued maintenance of the gold standard.

Second. The continuance in circulation of government promises to pay, which, when made a legal tender, constitute a forced loan, which are secured only by such resources as the exercise of the taxing power can render available, and which are payable only at the will of the debtor.

Third. The failure to provide the means for a gradual and sufficient increase of the volume of the currency to meet the needs of an increasing population and an enlarging commerce.

Fourth. The want of a natural outflow and inflow of the currency when and as, and only when and as, the agricultural, manufacturing, and commercial interests of the country require, at a given time, either a greater or a less quantity of currency in circulation.

Fifth. The failure to secure such a distribution of the loanable capital of the country as will tend to equalize the rates of interest in all its parts.

Sixth. The confusion of the fiscal functions of the Treasury as the receiver of the public revenue and the disburser thereof under congressional appropriations with its issue and redemption functions in exchanging and redeeming the currrency.

Seventh. The circulation of different forms of government currency having different qualities as to legal tender and receivability for government dues.

Eighth. The circulation of silver dollars of full legal-tender quality whose nominal value as coins so largely exceeds their value as bullion, that they offer tempting inducements to successful counterfeiting.

Ninth. The circulation of a national bank currency based upon government bonds, presupposing a continuing issue of those bonds, diminishing the loanable funds of the banks, and, by reason of their bond basis, incapable of increasing in volume with a temporary demand for more currency, and of decreasing with the cessation of that demand.

THE STANDARD.

The most serious evil affecting our present monetary system is the threatened degradation of its standard. The story is familiar, but it will be useful to recall it briefly in this connection. The close of the Civil War found the people of the United States in the possession of a depreciated legal-tender paper currency, with its inevitable accompaniment of inflated prices. To return from such a condition to one of sound money and normal prices is always a painful process, and when the government began that process, under Secretary McCulloch, in 1866, there was an outcry against it, and it was suspended. From a remonstrance against the payment of the demand obligations of the Treasury at *that* time the movement grew to an opposition to the payment of them at *any* time, and finally to a demand for the issue of more of them, and that, not in the form of promises to pay, but of fiat paper dollars. The number of persons who were carried away by these delusions was very great. The political struggle which ensued was prolonged and intense, and the victory which the defenders of sound money achieved in the passage of the resumption law of 1875 was a close one.

That victory ought to have settled all disturbing questions in relation to the monetary policy of the United States, and would have done so, so far as can now be seen, if it had not been for the fall in the value of silver, which began while the contest was going on. From 1792 to 1873 the legal standard of value in the United States was the double one of gold and silver at prescribed ratios. By the coinage act of 1873 the silver dollar, which was then worth more than the gold dollar, and which no one could foresee would ever be worth less, and of which very few were in existence, was dropped from the coinage, leaving gold as the only full legal-tender coined money.

Soon after the passage of this law, the value of silver began to decline. The friends of cheap money saw their opportunity and lost no time in improving it. The clamor for the restoration of the sixteen-to-one silver dollar to free coinage began. This was a far more plausible, and therefore more dangerous, move-

ment than the fiat paper money scheme. Silver had a real value. At the beginning of the agitation that value was not greatly less than sixteen of silver to one of gold in weight. It was claimed that its admission to free coinage would increase its value to the full measure of that ratio. Patriotic sentiment was invoked in its favor. It was said to be the money of the fathers and the Constitution. To this was added the appeal to class prejudice. Gold was said to be the money of the rich; silver of the poor. Gold was said to be increasing in value, and so depressing all prices, and increasing the burden of all debts to the unjust advantage of all creditors. The advocates of free silver professed to be the champions of the farmer, the mechanic and the laborer against the aggressions of the capitalist, the banker, and the corporation. Such appeals come to men in debt, out of employment, and downcast in spirits with great seductive force. Evidence enough of that fact is on record in the election returns of 1896.

The pertinence of this retrospect is the proof which it affords of the fact that so large a portion of the people of the United States have no conception of the nature or importance of a money standard. In such a country as ours the legal monetary standard is whatever a majority, or a plurality, it may be, of the voters say it shall be. It is therefore of the utmost importance that the standard shall not only be distinctly declared in the law but clearly fixed in the minds of the people as the first and indispensable element of a sound monetary system. All history is evidence that the people who suffer most from a degradation of the standard are not the rich and powerful, but the poor and helpless. Compared with this danger, all existing evils of mere kind or quantity of our present money are relatively only inconveniences. The first need of the situation it to fortify the standard.

There are some considerations as to the standard which ought to commend themselves to the judgment of the country. There must be some standard of value. The standard must have a market value as a commodity independently of any governmental fiat and of all legal-tender laws; it must be durable; it

must be homogenous; it must have a maximum of value proportioned to its bulk; it must have, as a commodity, as stable a market value as possible, and in order to secure the stability of that market value, the relation between its supply and demand must be as constant as possible. Gold alone fulfills these conditions. The civilized world has, therefore, determined that the standard shall be gold. No government, however powerful, can in fact reverse that determination, or, without injury to the interests of all its people, attempt to establish any other standard of value.

There is a clear distinction between the functions of money as a standard of value and as a medium of exchange. While that money which is the standard of value will always serve also as a medium of exchange, yet other forms of currency of inferior market value can in no sense be a satisfactory standard, and can be a suitable medium of exchange only when the convertibility at par into the standard money is assured. Any possible currency is, therefore, of one of two kinds. The first kind is that which has been adopted as the standard of value. The second kind is that which is, without reference to its market value as a commodity, receivable at par, because convertible at par into the standard money. Today gold is the only currency of the first kind. United States notes, national bank notes, silver dollars, subsidiary silver, and minor coins, are currency of the second kind. The face value of the silver dollars, the subsidiary silver, and the minor coins more or less largely exceeds their bullion value, and they differ from the note-issues only in the fact that the material of which they are made has some market value as bullion. Under modern conditions of business, purchases, sales, loans, the discharge of debts, and even payments of wages are effected in great part by drafts, checks, or transfers of credits. While the work which the money, which is the standard, actually performs in the exchanges of the country is relatively small, yet every one of those exchanges is based on that standard. If all the money of the country is convertible at par into gold, there may then be whatever, and as much, of the representative forms of currency as the convenience of the people may require.

On the other hand, if the standard of value be lowered, there necessarily follows a loss of public confidence, a lessened use of credit and of credit forms of currency, and a consequent diminution of the effectiveness of the currency.

The gold standard, therefore, does not mean gold monometalism, and it necessarily results, not in contraction, but in the greatest possible expansion of the currency within the bounds of safety.

As gold derives no value from any legal-tender law, nor any value from coinage at the mint beyond "the ascertainment that its weight and purity are what the law requires," and the certifying by the government's stamp that it possesses those qualities, it is, and it ought to continue to be, admitted to free coinage. On the other hand, silver, nickel, and copper should be coined only upon government account, into coins of limited legal tender quality; should be issued from the mint only in exchange for gold at par; and should be re-exchangeable at the Treasury in convenient multiples for gold coin at par. Under this system there could be no arbitrary contraction or expansion of the coin currency, nor any tampering with the standard of value, and the people would then carry to their credit in the ledger of the Treasury Department the profits upon the coinage of silver, nickel, and copper.

Many of our fellow citizens have hoped in all sincerity that the problem of the standard would be solved by international bimetallism. An earnest effort has been made to realize that hope, but it must now be abandoned. The only alternatives, therefore, are the continued maintenance of the existing gold standard, or the adoption of the silver standard. If the latter alternative be taken, the obligations of the United States, of the states, of all municipalities, of all private corporations, and all of individuals, the receipts of income from every source, the proceeds of policies of insurance, the deposits in banks and saving funds, and the wages of labor, will then be payable in a debased and depreciated currency; and individual and corporate bankruptcy, and, worst of all, national dishonor, will follow. If the former alternative be taken, and the necessary means be adopted to

secure the stability of the gold standard, the credit of the country will be established; the national debt can be refunded at lower interest rates; the surplus capital of the world will come here to find profitable investment; and our country will enjoy the prosperity that follows a currency system based upon a stable standard of value.

The means necessary to establish and preserve popular confidence in the continued maintenance of the gold standard are:

1. An explicit legislative definition of the gold standard, and a pledge that it will be maintained.

2. A requirement that all obligations, public and private, unless otherwise stipulated in the contract, shall be payable in conformity with that standard.

3. The adoption of a plan for the gradual retirement of the outstanding note-issues of the government.

As the gold deposited for certificates cannot be used by the government, and as the issue of gold certificates is of no advantage to the government or to the people, there does not seem to be any reason for their continued issue.

THE SILVER CURRENCY.

The silver certificates, being the expressed representatives, dollar for dollar, of silver dollars deposited, ought to continue to be exchangeable only for silver dollars.

The face value of the subsidiary silver coins more largely exceeds their bullion value than is wise even in the case of token coins. They might be called in and recoined; but the expense and inconvenience of that operation are such as to render its postponement advisable.

As the owners of a large stock of silver bullion, silver dollars, and subsidiary silver, the people of the United States are directly interested in the continued use of silver as currency, provided that the silver can continue to be maintained at par with gold.

The silver dollar is by reason of its size and weight an inconvenient coin to carry about the person, or to use in change. Most people, therefore, do not desire to use silver dollars as currency, if they can have, as representatives of the coin dollars, notes in

denominations of $1, $2 and $5. Even with the inducement of free transportation from the Treasury, it has never been possible to force into circulation at any one time an amount of silver dollars exceeding $67,000,000, and there are now outstanding only $60,196,778, of which at least $10,000,000 are held by the national and state banks. On the other hand, there are in circulation $354,355,031 of notes of the denominations of $1, $2 and $5, of which $154,965,473 are silver certificates and $199,-389,558 are United States notes, Treasury notes of 1890, and national bank notes. Of the total amount of silver certificates outstanding, $154,965,473 are, as before stated, in denominations of $1, $2 and $5, and $229,205,031 are in larger denominations. If, therefore, the United States notes, Treasury notes of 1890, and national bank notes of the denominations of $1, $2 and $5 be retired, their places can be taken by a further issue of silver certificates to the amount of $199,389,558 in denominations of $1, $2 and $5, and an equivalent amount of silver certificates of larger denomination be retired, leaving of the $229,205,031 now outstanding in larger denominations $29,815,473 to be redeemed in silver dollars when presented for redemption. If, also, the silver dollars now in circulation and amounting to $60,196,778 should be deposited in the Treasury, the balance of $29,815,473 of silver certificates in denominations exceeding $5 could be replaced by an issue of silver certificates in denominations of $1, $2 and $5, and there might, without any expansion of the present outstanding circulation, be a further issue of silver certificates in denominations of $1, $2 and $5, amounting to $30,381,305 based upon the silver dollars so deposited. The place of the retired United States notes, Treasury notes of 1890 and national bank notes of small denominations would be taken by an issue of notes of large denominations of the same kinds, so long as the United States notes and Treasury notes of 1890 are unredeemed.

The effect of this plan will be that the currency of the country of all denominations below $10 will be silver coin, and silver certificates based upon silver dollars held in the Treasury, supplemented by gold coins of the denominations of $2.50 and $5.

The government has received the full face value for all the

silver dollars which have been put in circulation either in kind or by means of representative certificates. The silver coins differ from the note issues only in the fact that the material of which they are made has some market value as bullion. They are, nevertheless, as justly obligations of the government and as properly exchangeable at par for gold as the United States notes. A gold reserve must, therefore, be provided for such exchange; but as the retirement of the United States notes, Treasury notes of 1890, and national bank notes of denominations less than $10 will leave the silver dollar, the silver certificates in denominations of $1, $2 and $5, the subsidiary silver, the minor coins, and the gold coins of the denominations of $2.50 and $5 as the only currency for small transactions, it is probable that the trade of the country will keep the silver and its representatives in circulation, and prevent the coming in of any considerable quantity of that currency. It is also to be observed that when popular confidence shall have been restored as to the maintenance of the gold standard and the security of our currency system, there will be no general desire to exchange silver dollars or silver certificates for gold, for the silver currency will then be, beyond question, as good as gold.

The Treasury has an asset in its silver bullion not held against outstanding certificates, which may be utilized by selling it from time to time, as the German government has done with its surplus silver. Of course, such sales should be carefully made in such quantities as not to unduly depress the market for silver bullion. It is, therefore, suggested that authority be given to the Secretary of the Treasury to make such sales in his discretion.

It may be well to consider whether the sum of $452,713,792 of silver dollar pieces, with seigniorage of over 50 per cent., which remain as the evidence of a serious danger to the existing standard, is not too large to be permanently retained in our currency; and if this should prove to be the case, whether a sufficient number of these silver dollars should not be ultimately, although not immediately, withdrawn and sold as bullion.

It is an essential part of a sound system of finance, that the

government should raise by taxation a revenue adequate to its necessary expenditures. But as the revenues are sometimes deficient, it is advisable that power be given to the Treasury to sell short-term bonds to supply such deficiency. Under existing legislation only long-term bonds can be sold; and, if the government comes into possession of a surplus, such bonds cannot be retired save by purchasing them at a premium. On the other hand, short-term bonds can, under a securely-established currency system, be negotiated at low interest rates; can be, if necessary, extended at maturity, and can be retired by purchase in advance of maturity without a heavy loss in payment of premium. For similar reasons it is suggested that long-term bonds should contain a reserved option to the government of retirement.

It is to the interest of the government and of the people that all the people should have an equal opportunity of investing their savings in the obligations of the government when issued. As the mass of the people have not the necessary facilities for the safe custody of bonds, it is suggested that a system be adopted of inscription on the books of the Treasury, instead of bonds, similar to that which has long prevailed in the case of the English consols and the French rentes. Under this system it will be possible to place government loans by a really popular subscription.

THE DEMAND OBLIGATIONS OF THE GOVERNMENT.

It is a part of the plan submitted that the demand obligations of the government shall be put in course of retirement by a process which shall be gradual in its operation as respects the current money and business of the country, but which will lead ultimately to the substitution of other forms of money in their place. The demand obligations, properly so called, consist of the United States notes or "greenbacks," amounting to $346,681,016, and the Treasury notes of 1890, amounting to $109,313,280. While the former are not in terms payable in gold, and the latter are by law payable in gold or silver, at the discretion of the Secretary of the Treasury, it is obviously necessary,

in order to keep good the pledge of the government to maintain the parity of the two metals as coined, to pay all its notes in gold when gold is demanded by the holder. So that, in a practical sense, the note obligations of the government payable in gold on demand must be reckoned at the sum of the greenbacks and the coin notes, that is, $455,994,296.

The measures recommended in relation to these obligations may be briefly summarized as follows:

1. The separation of the note issuing and redeeming operations of the Treasury from its ordinary fiscal operations by the creation of a Division of Issue and Redemption, and the transfer to it of the gold reserve and other resources held against obligations; the government notes to be paid in gold coin on demand through that division.

2. The reserve to be maintained from revenue when adequate, and by sale of bonds when necessary; the proceeds of such sales to be used for that specific purpose, and no other.

3. Notes paid to be canceled as paid, up to the amount of $50,000,000; the cancellation thereafter for five years not to exceed the increase of bank notes. After five years the notes paid to be retired at a rate not exceeding 20 per cent. per annum of the amount then outstanding; at the end of ten years the legal-tender quality of the notes then outstanding to cease

4. No note, once paid, to be reissued otherwise than in exchange for gold, except that, in case of an excessive accumulation of redeemed and uncanceled notes in the Division of Issue and Redemption, the Secretary of the Treasury may use them in the purchase of United States bonds for the benefit of the Division of Issue and Redemption; such bonds to be held in that division and sold for the benefit of the redemption fund when directed by the Secretary of the Treasury.

At the present time the government has no fund for the payment of its demand obligations except the general balance in the treasury applicable alike to the payment of all dues. Our revenues are more or less uncertain in amount; our expenditures are large and growing, and liable to vary with changes in the spirit of the times and the disposition of Congress and the

people. It is, therefore, uncertain whether we shall have at any particular time an adequate fund for the redemption of the demand obligations without recourse to borrowing. Borrowing is an ineffectual resource, because, under the law as it stands, the notes which have been paid must be returned to circulation, and, so, may be used over and over to draw out the borrowed gold. The uncertainty of this situation is increased by the fact that the issue of bonds rests with the executive department, and whether it will be resorted to or not will depend upon the personal views and discretion of the officials at the head of that department. More serious still is the fact that it is in the power of the executive department, as the law now stands, to decide absolutely whether the government notes shall be paid in gold or in silver. An end ought to be put to this anomalous and hazardous situation by making specific and adequate provision for the payment of the demand obligations, and directing in the law that such payment shall be in gold at the demand of the holder.

It is regarded as certain that if this were done there would be comparatively little presentation of notes at the Treasury for redemption, in the absence of serious public alarm, and that the best possible security against the recurrence of such alarm would be attained. The provision authorizing the purchase of bonds during the period mentioned is recommended, with the belief that it would enable the Secretary of the Treasury to prevent any injurious contraction. The bonds purchased with the notes returned to circulation would furnish the means with which to redeem them when presented again.

A proposal to retire the government notes may be received at first with disfavor by some persons, but it must be supposed that, upon due reflection, preferences which are to a large extent merely sentimental will yield to arguments resting on solid grounds of safety and advantage to the government and the people. All good citizens must desire that the credit of the government shall rest on a basis so secure that no wind that can blow will ever shake it; that the standard by which all obligations and values are measured shall be the most perfect expression of truth and honesty and unchangeableness

which is possible of attainment; and that all the money in circulation shall be up to that standard in its value, and shall, in respect to its form and quantity and distribution, serve every requisite of commercial and personal use as equally and completely as is in the nature of things possible. If it is necessary in order to accomplish these results to relieve the government from the function of supplying money in the form of its own notes, it is only necessary to make that fact clear to the people to secure their approval of the measure. Not to believe this would be to despair of the capacity of the people for wise and successful government.

A government paper currency educates the people who use it in false notions concerning money. Such a currency, circulating year after year without redemption, appears to those who do not look at it critically to derive its value from the "government stamp." It ceases to be regarded as a promise to pay money, and is thought to possess the virtue of money in and of itself. It is so easy to create it that in any emergency the call for more is perfectly natural. There can be no doubt that the aberration of judgment on the money question by so many of our people in recent years has been largely due to the miseducating influences of the greenback currency. The young and middle-aged men of today have grown up in a vitiated financial atmosphere.

Such a currency also lacks the important quality of automatic adaptability to the varying demands of business. A paper dollar is a useful form of currency so long as there is legitimate use for it. When there is no legitimate use for it, it becomes a superfluous and injurious thing — a temptation to speculation, extravagance and unwise business ventures. A paper currency created by legislation is fixed in volume by the law of its creation, and can neither contract nor expand in response to those varying conditions which are bound to occur in the affairs of men.

More important than this is the fact that such a currency puts upon the government the burden of maintaining the credit of all the financial institutions of the country. The government

notes are as good as gold only so long as the government redeems them in gold. If it should fail in that, all bank notes, bank deposits, insurance losses, and debts and dues of every kind not specifically payable in gold would be payable in the depreciated paper or in silver. Every passing incident, therefore, which raises an apprehension, however slight, of a possibility, however remote, that the government may be unable or unwilling to maintain gold payment of its obligations sends a nervous tremor through the whole business system of the country. A sovereign government cannot be compelled to pay its debts ; it pays them only when it wills so to do ; and there is in the public mind more or less doubt as to the continuance of the will of our government to pay its demand obligations in money satisfactory to the holders thereof. In these days of large invested capital and small profits such a condition is a serious drag on business enterprise.

The existence of a large outstanding debt payable on demand is also a source of weakness to the government in its international relations. Modern warfare is so expensive that it is almost as much a matter of money as of men. A nation suddenly confronted by the alternative of war or dishonor would be greatly handicapped by a large demand debt which it must provide for at once. Great additional force is given to this consideration by the fact that it would be scarcely possible for this nation to engage in war in its present situation—counting as part of the situation the imperfect development of clear conceptions on the subject of money in the minds of the people—without a suspension of specie payments and a resort to further issues of government notes. There is no occasion to criticise those patriotic men who believed that the issue of greenbacks was necessary to save the Union. But the world has advanced in financial knowledge and skill since then. There is no doubt that if our government were relieved of its existing demand obligations, and our currency system put in working order upon a gold basis, it would be entirely possible for us to go through a war without suspension of specie payment, or any derangement of our monetary system. If war should come, the value to the

country of the ability thus to avoid the indirect losses following from depreciated currency, inflated prices and financial demoralization would be so great that the burden of paying off now our demand obligations would be as nothing in comparison.

While the silver dollars are not, by the terms of the law, exchangeable for gold coin, their current value is sustained by the promise of the government to maintain their parity with gold. So that we have a total volume of paper and silver in circulation amounting to $908,708,088, all resting for its value on the credit of the government, except in so far as the bullion in the silver dollars has value. That credit is maintainable only as a whole. The paper of the United States could not be dishonored and its silver upheld. It is necessary, therefore, that the government shall keep a large fund in gold, and continue to do so so long as the credit currency is outstanding. Such a fund in the hands of the government is defenseless against attack. In countries where the government has no demand debt outstanding, and the gold reserve is held by banks, the nation's stock of gold is capable of some degree of protection through the rate of interest charged for loans. But our government has no such resource. Its great gold reserve is an open mine free to all who bring its notes. The exigencies of war or commerce are liable to create sudden and great demands for gold. And as the entire monetary system of the country hangs upon that one reserve, the situation is one of uncertainty and hazard against which no insurance is possible, and which is bound to continue while the government demand obligations are extant in large volume. It would go far to relieve the perennial strain of this situation and strengthen our financial position at home and among nations to transfer this burden to the banks and other moneyed institutions.

As against these serious disadvantages there is no advantage which can possibly be claimed for paper money in the form of government notes over any other form of paper money equally good—that is, equally current in all parts of the country and equally certain of redemption in specie on demand—except the saving of interest on so much of the public debt as is represented

by the notes. Our national bank notes have served the uses of the people as well as greenbacks. In all ordinary business transactions no one cares which he receives or pays out. The supposed economy of the greenbacks is more apparent than real; indeed, when we consider all the facts they are an extremely costly form of money. To keep them good requires the maintenance of a large gold reserve in the Treasury, which offsets the saving of interest to the extent of one-fourth or more. When conditions arise which threaten to deplete that reserve and compel a resort to extrordinary measures to protect it, no limitation of cost can be observed, and it is impossible to know what sacrifice may become necessary.

In order to create the gold reserve required for the resumption of specie payments in 1879, United States bonds to the amount of $95,500,000 were sold, and most of which are still outstanding in a refunded form. During the years 1894, 1895, and 1896 bonds to the amount of $262,315,400 were sold. Throughout those years there was a constant drain of gold to redeem United States notes. By the law of 1878 it was provided that United States notes "shall not be retired, canceled or destroyed, but they shall be reissued and paid out again and kept in circulation." There being a deficit in the ordinary revenue, these notes continued to go out again and again in payment of ordinary expenses. Whether the deficit would have required the sale of bonds if there had been no want of public confidence in the payment of the notes, and they had not continued to be presented for redemption, is a point upon which there may be a difference of opinion. Not to enter upon that question closely, it is clear that with interest to pay on $357,815,400 of indebtedness incurred chiefly, if not wholly, in consequence of the existence of the government notes, and $100,000,000 of reserve lying idle in the Treasury, the saving in interest by the United States notes is a small gain compared with the unending burden of providing for their redemption.

In considering the cost of these operations, it is necessary to take into account, also, the expense of engraving, printing, bookkeeping, and other incidents. From all of which it appears

that instead of saving money to the people, the United States notes have been and are now costing them a large sum annually. This cost is liable to be increased by the further issue of bonds for the protection of these notes in emergencies—not now present, nor immediately threatening, but always possible.

Between 1st January, 1879, and 1st November, 1897, the Treasury paid United States notes in gold to the amount of $507,470,149, being $160,789,133 in excess of $346,681,016, the entire amount outstanding at the resumption of specie payments; which paid and repaid and yet undiminished amount still remains outstanding to be paid again, and, unless some change be made in the existing law, again and again.

Between 14th July, 1890, and 1st November, 1897, Treasury notes of 1890, issued for the purchase of silver bullion, have been redeemed in gold coin and reissued to the amount of $90,680,879.

Morever, we are carrying a burden put upon us by the doubt and uncertainty which the presence of this large demand debt of the government in the form of current money produces, which no man can estimate. Any one of a number of circumstances might cause a suspension of gold payment of its notes by the government. A war, a failure of revenue, a commercial revulsion, an election, a weak president—any one of these unfavorable conditions, exciting alarm and then panic, might cause the Treasury to be depleted of its gold and its notes to be dishonored. The injury which all business suffers from this condition of the currency is none the less real because it is not distinctly perceived. The evil may go long unnoticed, like friction in machinery or malaria in the air; but it has its effect nevertheless. When it comes to an acute manifestation of the evil, such as we have experienced within the last five years, the loss occasioned is beyond computation. Many concurring causes contributed to the business depression which the people of the United States have suffered within that period; but it cannot be doubted that the fact that the entire paper currency of the country consisted of or rested upon notes of the government, and that there was an uncertainty as to the redemption of those

notes, was the chief cause of that great disaster. All the government notes outstanding, and all the interest they have saved since they were issued, would pay only a small fraction of the loss which the American people have suffered within that time.

THE BANKING SYSTEM.

Under the present system, a bank may issue circulation not exceeding 90 per cent. of its paid-up capital, and also not exceeding 90 per cent. of the par value of the bonds deposited. Each bank is required to deposit with the Treasury a redemption fund of 5 per cent. of its outstanding circulation; and the notes are secured by a first lien on all the assets of the bank, including the liability of the shareholders. While in some cases shareholders of and depositors in national banks have lost by unskillful or unfaithful management, yet the bank circulation has been so well secured that no holder of a national-bank note has ever had occasion to inquire what bank issued the note, or has ever lost any part of the amount of the note. But the relative increase in the number of the banks and decrease in the amount of the issue of the circulation shows that the system should be so amended that, while the notes issued thereunder shall be as adequately secured as under the present system, there will yet be an increased issue of bank notes, and an outflow and inflow of those notes as the business of the country may require.

A note circulation, issued under the present system, unquestionably satisfies the condition of security, but is open to grave objections.

1. It presupposes a continuing issue of government bonds, when it ought to be the national policy to steadily reduce and ultimately extinguish the debt of the United States.

2. The investment in bonds diminishes the funds of the bank available for loans to its customers.

3. Such a currency does not increase in volume with a temporary demand for more currency, nor decrease with the cessation of the demand.

All the conditions can be met by:

1. A national system with improved regulations as to examination, supervision, etc.

2. The issues to be based upon those readily convertible assets which represent the exchangeable wealth of the country in its natural products and manufactured goods.

3. A limitation of the amount of the issues to the unimpaired capital of the issuing bank.

4. A further security in a common guaranty fund.

5. The continuance of the present redemption fund and method of redemption, with extension of the places of redemption under the approval of the Secretary of the Treasury.

6. A further security in the liability of the shareholders to the full amount of the par of their shares.

The chief difference of the proposed, from the existing, system of bank notes is that it gradually does away with the requirement that there shall be a deposit of bonds with the government as a condition for the issuance thereof. As now, the notes are to be a first lien upon all the resources of the banks, including the stockholders' liability. This change is necessary because of the scarcity of United States bonds; and the attempt to substitute other bonds would lead to many evils. The change is wise because it permits the issuance of notes in the way and at the time when, and for the purpose for which, they would be issued under natural conditions, if no law prevented. Such a system would more perfectly than any other give the country a circulating medium; it would readily and quickly adjust itself from season to season to meet the wants of the business of the country requiring bank notes for its convenient transaction. Under the present system, the problem presented to a bank, when its customers call for currency, is not the amount of its own assets, but its ability and desire to make an investment in something quite apart from its usual business as a bank, in order that it may be in a position to provide a man who wishes to move property or employ labor with the tools most convenient at the time for his purpose. Notes secured as herein provided cannot fail to be safe, because,

being based upon all the resources of all the banks issuing them, they are based upon the whole business of the country, and that business is the thing which gives life and value to all securities, government, municipal, railway, and individual obligations. Should all the resources of the banks ever so shrink in value as not to be ample security for the amount of notes that could be issued under this plan, then all other securities, even government bonds, would become valueless. The banks are bound together for the security of these notes to accomplish the same purpose that the deposit of bonds is intended to accomplish, namely, to guard against loss through the misfortune or bad management of single banks, and thus save the holder of a bank note the need of ascertaining the standing of any bank. The objection that is sometimes made that the larger banks in the great cities would not issue notes because of an apprehended liability for other banks, is shown by statistics to be groundless. 1893 was the year of largest bank failures; but had all the banks of the country then issued notes up to 80 per cent. of their capital, the amount of their assessment to make good the ascertained deficiencies of that year up to the time of the Comptroller's report of 1896 would have been only a fraction of 1 per cent. Had 80 per cent. of the capital of all national banks been issued in notes, upon the proposed plan, since the beginning of the national banking system in 1863, the assessment upon the banks annually would have been an amount so insignificant that it need not be taken into account. Taking the country banks as a whole, it is found that on 5th October last, they had $401,000,000 of the $631,000,000 of national bank capital. Should they issue notes up to 80 per cent. of that capital, they would have $321,000,000 of notes, and there would be $1,956,000,000 of resources against these notes, not counting stockholders' liability.

If these resources of the country banks are insufficient security for this amount of notes, they will be insufficient only because there would then be such a condition of business paralysis that government, municipal, and railway bonds would be valueless, and also few, if any, banks in the reserve cities

would remain solvent. The occurrence of this disaster is so improbable that its consideration may be dismissed.

In some quarters fear is expressed that there would be undue expansion under this plan. There is no danger of this. The system of redemption, not only at the banks but at the Treasury in Washington and at the subtreasuries, would strongly guard against that. The expansion over that which could be effected, were no notes issued at all, will be found, upon investigation, to be small. Dangerous expansion does not take the form of the issue of bank notes, but of the extension of credits. Very few borrowers take their loans in the form of bank notes. The bank note is only one form in which he to whom credit is given will use that credit; he can use it equally well for most purposes if the loan is placed to the credit of his account by the bank making the loan to him, or by some other bank, or by a private person.

The plan increases stockholders' liability, so that each stockholder is absolutely liable to assessment up to the par of his stock, and not ratably and equally with every other stockholder as now.

The existing tax of 1 per cent. per annum on circulation is repealed. In its place taxation of capital, surplus, and undivided profits is provided. The issue of circulating notes is only one form in which a bank expresses its demand liability. The other form, deposits, is, under the development of modern banking operations, of vastly greater importance, and the one which, in cities and highly organized commercial communities, is most used. In October, 1897, the country banks issued more than 72 per cent. of all notes issued. The reserve banks, except those of the central reserve cities, New York, Chicago, and St. Louis, issued more than 18 per cent., New York less than 8 per cent., and Chicago and St. Louis together about 1½ per cent. Surplus and undivided profits and capital show the profits and property of banks, and these are certainly more legitimate objects of taxation than the mere instruments which banks may be called upon by their customers to issue to serve chiefly the convenience of those customers. This tax makes as equitable an apportionment of the expenses of the system as can be devised.

The plan provides that these notes shall be received by banks and by government in payment of debts and dues under the same conditions as now. This provision is made, not because it materially adds to the security of the notes, but that they may be more convenient to the people and in aid of their speedy redemption.

This method of passing from the present to the new system is proposed in order that the change may be gradual and that the country may become accustomed to it in this way, and also to guard against the possibility of undue sale of United States bonds. Doubtless, portions of the country lack adequate banking facilities; and to meet this a diminution of the minimum capital required for banks in places of small population, and authority for the establishment of branch banks, are advised.

PLAN OF CURRENCY REFORM.

I. Metallic Currency and Demand Obligations.

1. The existing gold standard shall be maintained; and to this end the standard unit of value shall continue, as now, to consist of 25.8 grains of gold, nine-tenths fine, or 23.22 grains of pure gold, as now represented by the one-tenth part of the eagle. All obligations for the payment of money shall be performed in conformity to the standard aforesaid; but this provision shall not be deemed to affect the present legal tender quality of the silver coinage of the United States or of their paper currency having the quality of legal tender. All obligations of the United States for the payment of money now existing, or hereafter entered into, shall, unless otherwise expressly provided, be deemed, and held, to be payable in gold coin of the United States, as defined in the standard aforesaid.

2. There shall continue to be free coinage of gold into coins of the denominations, weight, fineness, and legal tender quality, prescribed by existing laws.

3. No silver dollars shall be hereafter coined.

4. Silver coins of denominations less than $1 shall be coined upon government account, of the denominations, weight, fineness, and legal tender quality prescribed by existing laws.

5. Minor coins shall continue to be coined upon government account, of the denominations, weight, fineness, and legal tender quality prescribed by existing laws.

6. Subsidiary and minor coins shall be issued and exchanged as prescribed by existing laws, except as hereinafter otherwise provided.

7. There shall be created a separate division in the Treasury Department, to be known as the Division of Issue and Redemption, under the charge of an Assistant Treasurer of the United States, who shall be appointed by the President by and with the advice and consent of the Senate.

8. To this division shall be committed all functions of the Treasury Department pertaining to the issue and redemption of notes or certificates, and to the exchange of coins; and this division shall have the custody of the guaranty and redemption funds of the national banks, and shall conduct all the operations of redeeming national bank notes, as prescribed by law; and to this division shall be transferred all gold coin held against outstanding gold certificates, all United States notes held against outstanding currency certificates, all silver dollars held against outstanding silver certificates, and all silver dollars and silver bullion held against outstanding Treasury notes of 1890, and all subsidiary and minor coins needed for the issue and exchange of such coins, and the funds deposited with the Treasury for the liquidation of national bank notes. All accounts relating to the business of this division shall be kept entirely apart and distinct from those of the fiscal department of the Treasury; and the accounts relating to the national banks shall be kept separate and apart from all other accounts.

9. A reserve shall be established in this division by the transfer to it by the Treasurer of the United States from the general funds of the Treasury of an amount of gold in coin, and bullion, equal to 25 per cent. of the aggregate amount of both the United States notes and Treasury notes issued under the act of July 14, 1890, outstanding, and a further sum in gold equal to 5 per cent. of the aggregate amount of the coinage of silver dollars. This reserve shall be held as a common fund, and used solely for the redemption of such notes and in exchange for such notes, and for silver and subsidiary and minor coins.

10. It shall be the duty of the Secretary of the Treasury to maintain the gold reserve in the Division of Issue and Redemption at such sum as shall secure the certain and immediate redemption of all notes and silver dollars presented, and the preservation of public confidence; and

for this purpose he shall from time to time, as needed, transfer from the general fund of the Treasury to the Division of Issue any Redemption any surplus revenue not otherwise appropriated ; and in addition thereto he shall be authorized to issue and sell, whenever it is in his judgment necessary for that purpose, bonds of the United States bearing interest not exceeding 3 per cent., running twenty years, but redeemable in gold coin, at the option of the United States, after one year ; and the proceeds of all such sales shall be paid in to the Division of Issue and Redemption for the purposes aforesaid.

11. To provide for any temporary deficiency which may at any time exist in the fiscal department of the Treasury of the United States the Secretary of the Treasury shall be authorized at his discretion, to issue certificates of indebtedness of the United States, payable in from one to five years after their date, to the bearer, of the denominations of $50 or multiples thereof, with interest at a rate not to exceed 3 per centum per annum, and to sell and dispose of the same for lawful money at the Treasury Department, and at the subtreasuries and designated depositories of the United States, and at such post-offices as he may select. And such certificates shall have the like privileges and exemptions provided in the act to authorize the refunding of the national debt, approved July 14, 1870.

12. Whenever money is to be borrowed on the credit of the United States, the Secretary of the Treasury shall be authorized, instead of issuing the usual forms of engraved bonds, upon receiving lawful money of the United States, in sums of not less than fifty dollars ($50) in any single payment, to cause a record of all such payments to be made in books to be kept for that purpose in Washington, and thereafter, from time to time, to pay to those so registered on such books interest not exceeding 3 per cent. per annum in gold coin on the amount with which they shall severally stand credited on such books in the same manner and at the same dates as if they were the holders and owners of registered bonds of the United States ; and he shall also pay to those so registered the principal sum originally deposited, in gold coin, at the date of maturity of such inscribed loans. Suitable arrangements shall be made at each and every money order post-office in the United States for receiving such payments into the Treasury on like terms, as well as for the transfer, on proper identification, of any inscription on the books in Washington, or of any part thereof not less than fifty dollars ($50). No interest shall accrue or be paid on inscriptions which shall have been reduced below fifty dollars ($50). No charge of any kind

shall be made by any department or officer of the government for any service in connection with the receipt or transmission of the lawful money, nor in the transfer of inscriptions on the books at Washington.

13. The Division of Issue and Redemption shall on demand at Washington, and at such subtreasuries of the United States as the Secretary of the Treasury may from time to time designate :

(*a*) Pay out gold coin for gold certificates.

(*b*) Pay out gold coin in redemption of United States notes or Treasury notes of 1890.

(*c*) Pay out silver dollars for silver certificates of any denomination.

(*d*) Issue silver certificates of denominations of $1, $2 and $5, in exchange for silver dollars and for silver certificates in denominations above $5.

(*e*) Pay out gold coin in exchange for silver dollars.

(*f*) Pay out silver dollars in exchange for gold coin, United States notes or Treasury notes.

(*g*) Pay out United States notes or Treasury notes, not subject to immediate cancellation, in exchange for gold coin.

(*h*) Pay out and redeem subsidiary and minor coins as provided by existing laws.

(*i*) Pay out United States notes in exchange for currency certificates.

14. United States notes or Treasury notes once redeemed shall not be paid out again except for gold coin unless there shall be an accumulation of such notes in the Division of Issue and Redemption which cannot then be canceled under the provisions of the act, in which case the Secretary of the Treasury shall have authority, if in his judgment that course is necessary for the public welfare, to invest the same or any portion thereof in bonds of the United States for the benefit of the redemption fund, such bonds to be held in the Division of Issue and Redemption, subject to sale at the discretion of the Secretary of the Treasury for the benefit of the Division of Issue and Redemption, and not for any other purpose.

15. The Secretary of the Treasury shall be authorized to sell from time to time, in his discretion, any silver bullion in the Division of Issue and Redemption ; and the proceeds in gold of such sales shall be placed to the account of the gold reserve in the Division of Issue and Redemption.

16. The gold certificates and the currency certificates shall, whenever presented and paid or received in the Treasury, be retired and not reissued.

17. No United States note or Treasury note of 1890 of a denomination less than $10 shall hereafter be issued ; and silver certificates shall hereafter be issued or paid out only in denominations of $1, $2 and $5 against silver dollars held by or deposited in the Treasury.

18. The Assistant Treasurer in charge of the Division of Issue and Redemption shall, on demand, pay in gold coin all United States notes and Treasury notes presented for payment, and as paid cancel the same up to the amount of $50,000,000. After that amount shall have been paid and canceled, he shall then from time to time cancel such further amounts of notes so paid as shall equal, but not exceed, the increase of national bank notes issued subsequent to the taking effect of the proposed act.

19. If at the end of five years next after the taking effect of the proposed act any United States notes or Treasury notes shall be outstanding, a sum not exceeding one-fifth of such outstanding amount shall be retired and canceled each year thereafter ; and at the end of ten years after the passage of the proposed act the United States notes and Treasury notes then outstanding shall cease to be legal tender for all debts public and private, except for dues to the United States.

20. The Secretary of the Treasury may, in his discretion, transfer from surplus revenue in the general Treasury to the Division of Issue and Redemption any United States notes or Treasury notes which on such transfer could then lawfully be canceled under the provisions of the proposed act if they had been redeemed on presentation ; and when so transferred the same shall be canceled. The Secretary of the Treasury, in his discretion, whenever there may be United States notes or Treasury notes in the general Treasury which are not available as surplus revenue, and which upon transfer to the Division of Issue and Redemption could then lawfully be canceled under the provisions of the act, may exchange such notes with the Division of Issue and Redemption for gold coin, and such notes shall thereupon be canceled.

21. All vested rights of property or contract, and all penalties incurred before the taking effect of the proposed act or any part of it, shall not be affected by the passage thereof ; and all provisions of law inconsistent with any of the provisions of the proposed act should be repealed.

II. Banking System.

22. The total issues of any national bank shall not exceed the amount of its paid-up and unimpaired capital, exclusive of so much

thereof as is invested in real estate. All such notes shall be of uniform design and quality, and shall be made a first lien upon all the assets of the issuing bank, including the personal liability of its stockholders. No such notes shall be of less denomination than $10.

23. Up to an amount equal to 25 per cent. of the capital stock of the bank (the whole of its capital being unimpaired), the notes issued by it shall not exceed the value of United States bonds, to be fixed as hereinafter provided, deposited with the Treasurer of the United States. The additional notes authorized may be issued without further deposit of bonds.

Beginning five years after the passage of the proposed act, the amount of bonds required to be deposited before issuing notes in excess thereof shall be reduced each year by one-fifth of the 25 per cent. of capital herein provided for; and thereafter any bank may at any time withdraw any bonds deposited in excess of the requirements hereof.

24. Every national bank shall pay a tax at the rate of 2 per cent. per annum, payable monthly, upon the amount of its notes outstanding in excess of 60 per cent. and not in excess of 80 per cent. of its capital, and a tax at the rate of 6 per cent. per annum, payable monthly, upon the amount of its notes outstanding in excess of 80 per cent. of its capital.

25. Any bank may deposit any lawful money with the Treasurer of the United States for the retirement of any of its notes; and every such deposit shall be treated as a reduction of its outstanding notes to that extent; and the tax above provided for shall cease as of the first of the following month on an equal amount of its notes.

26. The Secretary of the Treasury shall annually fix the value of each series of bonds of the United States bearing a rate of interest exceeding 3 per cent. as equalized upon the rate of interest of 3 per cent. per annum, and such valuation as fixed by the Secretary on this basis shall be the valuation at which the bonds will be receivable upon deposit. Bonds payable at the option of the government shall be receivable at 95 per cent. of their then market value as determined by the Secretary of the Treasury. If any bonds shall be issued hereafter payable at a date named and bearing interest at 3 per cent., or less, they shall be receivable at par.

27. The Comptroller of the Currency shall from time to time, as called for, issue to any bank, the capital of which is full paid and unimpaired, any of the notes herein elsewhere provided for, on the payment

to the Treasurer of the United States, in gold coin, of 5 per cent. of the amount of notes thus called for, which payments shall go into the common guaranty fund, for the prompt payment of the notes of any defaulted national bank. Upon the failure of any bank to redeem its notes, they shall be paid from the said guaranty fund, and forthwith proceedings shall be taken to collect from the assets of the bank and from the stockholders thereof, if necessary, a sum sufficient to repay to said guaranty fund the amount thereof that shall have been used to redeem said notes; and also such further sum as shall be adequate to the redemption of all the unpaid notes of said bank outstanding.

28. Persons who, having been stockholders of the bank, have transferred their shares, or any of them, to others, or registered the transfer thereof within sixty days before the commencement of the suspension of payment by the bank, shall be liable to all calls on the shares held or subscribed for by them, as if they held such shares at the time of suspension of payment, saving their recourse against those by whom such shares were then actually held. So long as any obligation of the bank shall remain unsatisfied, the liability of each stockholder shall extend to, but not exceed in the whole, an amount equal to the par of his stock.

29. If the said guaranty fund of 5 per cent. of all the notes outstanding shall become impaired, by reason of payments made to redeem said notes as herein provided, the Comptroller of the Currency shall make an assessment upon all the banks in proportion to their notes then outstanding sufficient to make said fund equal to 5 per cent. of said outstanding notes.

Any bank may deposit any lawful money with the Treasurer of the United States for the retirement of any of its notes; or return its own notes for cancellation; whereupon the Comptroller shall direct the repayment to such bank of whatever sum may be the unimpaired portion of said bank's contribution to the guaranty fund on account of said notes.

Any portion of the guaranty fund may be invested in United States bonds in the discretion of the Secretary of the Treasury.

The taxes on circulation, provided for in paragraph 24, as well as the interest accruing from investment of any part of the guaranty fund, shall be held in the Division of Issue and Redemption in gold coin or in United States bonds in the discretion of the Secretary of the Treasury, and shall be a fund supplementary and in addition to the guaranty fund, to be used only in case said guaranty fund shall ever become

insufficient to redeem any bank notes issued hereunder, and it shall not be taken into account in estimating the amount of assessments necessary to replenish said guaranty fund or in repayments to banks of their contributions to the guaranty fund.

30. The present system of national bank note redemption should be continued, with a constantly maintained redemption fund of 5 per cent. in gold coin, and with power conferred on the Comptroller of the Currency, with the approval of the Secretary of the Treasury, to establish additional redemption agencies at any or all of the sub-treasuries of the United States, as he may determine.

31. So much of the provisions of existing law as require each national bank to receive at par, in payment of debts to it, the notes of other national banks, and making such notes receivable at par in payment of all dues to the United States except duties on imports, shall be extended to cover notes issued under the proposed plan.

32. National banks shall hold reserves in lawful money against their deposits of not less than 25 per cent. and 15 per cent. for the respective classes as now provided by law, at least one-fourth of which reserve shall be in coin, and held in the vaults of the bank. Neither the 5 per cent. redemption fund, nor the 5 per cent. guaranty fund, shall be counted as part of the reserve required. No bank shall count or report any of its own notes as a part of its cash or cash assets on hand.

33. Permit the organization of national banks with a capital stock of $25,000, in places of four thousand population or less.

34. Provision should be made whereby branch banks may be established with the consent of the Comptroller of the Currency and approval of the Secretary of the Treasury.

35. For the purpose of meeting the expenses of the Treasury in connection with the national bank system, a tax of one-eighth of 1 per cent. per annum upon its franchise as measured by the amount of its capital, surplus and undivided profits, shall be imposed upon each bank.

36. So amend existing laws as to provide —

(*a*) For more frequent and thorough examinations of banks.

(*b*) For fixed salaries for bank examiners.

(*c*) To provide for rotation of examiners.

(*d*) For public reports, regular or special, at the call of the Comptroller of the Currency.

(*e*) To make it penal for any bank to loan money, or grant any gratuity, to an examiner of that bank, and penal for such examiner to receive it.

37. Any national banking association heretofore organized may at any time within one year from the passage of the proposed act, and with the approval of the Comptroller of the Currency, be granted, as herein provided, all the rights, and be subject to all the liabilities, of national banking associations organized hereunder: provided, that such action on the part of such associations shall be authorized by the consent in writing of shareholders owning not less than two-thirds of the capital stock of the association.

38. Any national banking association now organized which shall not, within one year after the passage of the proposed act, become a national banking association under the provisions hereinbefore stated, and which shall not place in the hands of the Treasurer of the United States the sums hereinbefore provided, for the redemption and guaranty of its circulating notes, or which shall fail to comply with any other provision of the proposed act, shall be dissolved; but such dissolution shall not take away or impair any remedy against such corporation, its stockholders or officers, for any liability or penalty which shall have been previously incurred.

39. Any bank or banking association incorporated by special law of any state, or organized under the general laws of any state, and having a paid-up and unimpaired capital sufficient to entitle it to become a national banking association under the provisions of the proposed act, may, by the consent in writing of the shareholders owning not less than two-thirds of the capital stock of such bank or banking association, and with the approval of the Comptroller of the Currency, become a national bank under this system, under its former name or by any name approved by the Comptroller. The directors thereof may continue to be the directors of the association so organized until others are elected or appointed in accordance with the provisions of the law. When the Comptroller of the Currency has given to such bank or banking association a certificate that the provisions of this act have been complied with, such bank or banking association, and all its stockholders, officers, and employés, shall have the same powers and privileges, and shall be subject to the same duties, liabilities and regulations, in all respects, as shall have been prescribed for associations originally organized as national banking associations under the proposed act.

This plan is based in its main features upon principles, which are conceived to be fundamental and unchangeable, and which never have been, and never can be, departed from without disaster. Its methods and details are of course capable of considerable variation consistently with these principles. The methods suggested have been reached after very careful inquiry and study, and it is thought that they will prove to be practical, and adequate to the realization of a safe and steady system of finance and currency, in which all the people of our country, of whatever calling or political opinion, are equally and most deeply interested.

All of which is respectfully submitted.

WASHINGTON,
December 17, 1897.

GEORGE F. EDMUNDS,
Chairman.
GEORGE E. LEIGHTON,
Vice-Chairman.
T. G. BUSH.
W. B. DEAN.
CHARLES S. FAIRCHILD.
STUYVESANT FISH.
J. W. FRIES.
C. STUART PATTERSON.
ROBERT S. TAYLOR.

I sign except as to provisions relating to metallic currency and certificates issued thereon.

LOUIS A. GARNETT.

The undersigned, while heartily agreeing in general to the above plan, dissents from the principle involved in section 14, by which the Secretary of the Treasury is empowered to reissue United States notes in purchase of bonds,—believing that the increase of the circulation should not be left to the decision of

government officials; that no official should be exposed to the pressure which would thereby be created; that the issue of gold in redemption of the notes would prevent contraction; and that it is inconsistent with the principles on which an elastic bank currency has been recommended, because notes should not be issued by the government in an emergency, when bank issues have been above provided for exactly such an occasion.

J. Laurence Laughlin.

BILL EMBODYING COMMISSION'S PROPOSALS.

FIFTY-FIFTH CONGRESS, SECOND SESSION. } H. R. 5855.

IN THE HOUSE OF REPRESENTATIVES, JANUARY 6, 1898.

Mr. Overstreet introduced the following bill, which was referred to the Committee on Banking and Currency and ordered to be printed:

A BILL

TO PROVIDE FOR STRENGTHENING THE PUBLIC CREDIT, FOR THE RETIREMENT OF THE DEMAND OBLIGATIONS OF THE UNITED STATES, AND THE AMENDMENT OF THE LAWS RELATING TO NATIONAL BANKING ASSOCIATIONS.

Be it enacted, &c., That the standard unit of value shall as now be the dollar, and shall consist of twenty-five and eighth-tenths grains of gold, nine-tenths fine, or twenty-three and twenty-two one hundredths grains of pure gold, as represented by the one-tenth part of the eagle.

SEC. 2. That all obligations for the payment of money shall be performed in conformity with the standard provided for in section 1: *Provided*, That nothing herein contained shall be construed or held to affect the present legal tender quality of the silver dollar or the subsidiary or minor coins or the paper currency of the United States.

That all obligations of the United States for the payment of money now existing or hereafter to be entered into, shall, unless hereafter otherwise expressly stipulated, be deemed and held to be payable in gold coin of the United States, as defined in the standard aforesaid.

SEC. 3. That there shall continue to be free coinage of gold into coins of the denominations, weight, fineness, and legal tender quality, prescribed by existing laws.

No silver dollars shall be hereafter coined.

Silver coins of denominations less than one dollar shall be coined upon government account, of the denominations, weight, fineness, and legal tender quality prescribed by existing laws.

Minor coins shall continue to be coined upon government account, of the denominations, weight, fineness, and legal tender quality prescribed by existing laws.

Subsidiary and minor coins shall be issued and exchanged as prescribed by existing laws, except as hereinafter otherwise provided.

Sec. 4. That there is hereby created a division in the Treasury Department, to be known as the Division of Issue and Redemption, under the charge of an Assistant Treasurer of the United States, who shall be appointed by the President, by and with the advice and consent of the Senate.

Sec. 5. That to the Division of Issue and Redemption shall be committed all functions of the Treasury Department pertaining to the issue and redemption of notes and certificates, and to the exchange of coins, and the said Division of Issue and Redemption shall have the custody of the Bank Note Guaranty Fund and of the Redemption Funds of the national banking associations, and shall conduct the operations of redeeming the circulating notes of national banking associations, as prescribed by law; and to this division shall be transferred all gold coin held against outstanding gold certificates, all silver dollars held against outstanding silver certificates, all United States notes held against outstanding currency certificates, and all silver dollars and silver bullion held against outstanding Treasury notes issued under the Act of July 14, 1890, and such amount of subsidiary and minor coins as the Secretary of the Treasury shall consider necessary for the issue and exchange of such coins, and the funds deposited with the Treasury for the redemption or retirement of the circulating notes of national banking associations. All accounts relating to the business of this division shall be kept entirely apart and distinct from those of the other departments of the Treasury; and the accounts relating to the national banking associations deposited with the Division of Issue and Redemption shall be kept separate and apart from all other accounts.

Sec. 6. That a reserve shall be established in the Division of Issue and Redemption aforesaid, by the transfer to it by the Treasurer of the United States from the general funds of the Treasury of an amount of gold, in coin and bullion, equal to 25 per centum of the amount both of United States notes and Treasury notes issued under

the Act of July 14, 1890, outstanding, and a further sum in gold equal to 5 per centum of the aggregate amount of the coinage of silver dollars. This reserve shall be held as a common fund and used solely for the redemption of said notes and in exchange for said notes and for silver dollars and subsidiary and minor coins, as hereinafter provided.

SEC. 7. That it shall be the duty of the Secretary of the Treasury to maintain the gold reserve in the Division of Issue and Redemption aforesaid at such sum as shall secure the certain and immediate redemption of all notes and exchange of all silver dollars presented, as hereinafter provided for, and the preservation of public confidence; and for this purpose he shall from time to time transfer to the Division of Issue and Redemption any funds in the Treasury not otherwise appropriated, and in addition thereto he is hereby authorized to issue and sell, whenever it is in his judgment necessary to the ends aforesaid, bonds of the United States, bearing interest at a rate not exceeding 3 per cent. per annum payable in gold coin at the end of twenty years, but redeemable in gold coin at the option of the United States after one year; and the proceeds of all such sales shall be paid into the Division of Issue and Redemption for the purposes aforesaid.

SEC. 8. That the Division of Issue and Redemption shall, at Washington, and at such sub-treasuries of the United States as the Secretary of the Treasury may from time to time designate, on demand —

(1) Pay out gold coin for gold certificates.

(2) Pay out United States notes for currency certificates.

(3) Pay out gold coin in redemption of United States notes and Treasury notes of 1890.

(4) Pay out silver dollars for silver certificates of any denomination.

(5) Issue silver certificates of denominations of one dollar, two dollars, and five dollars, in exchange for silver dollars and for silver certificates of denominations above five dollars.

(6) Pay out gold coin in exchange for silver dollars.

(7) Pay out silver dollars held in the Division of Issue and Redemption aforesaid and not covered by outstanding silver certificates, in exchange for gold coin, United States notes or Treasury notes.

(8) Pay out United States notes or Treasury notes, not subject to immediate cancellation, in exchange for gold coin.

(9) Pay out gold coin in exchange for subsidiary and minor coins presented in sums of twenty dollars or multiples thereof, and pay out

subsidiary and minor coin in sums of twenty dollars or multiples thereof, in exchange for any lawful money.

(10) Pay out in redemption of national bank notes the moneys in the division available for that purpose.

SEC. 9. That the Division of Issue and Redemption shall, on demand, pay in gold coin all United States notes and Treasury notes presented for payment, and as paid cancel the same up to the amount of $50,000,000. After that amount shall have been paid and canceled, it shall then from time to time cancel such further amounts of notes so paid as shall equal, but not exceed, the increase of national bank notes issued subsequent to the taking effect of this Act.

SEC. 10. That if at the end of five years next after the taking effect of this act any United States notes or Treasury notes shall be outstanding, a sum not exceeding one-fifth of such outstanding amount shall, as received, be retired and canceled each year thereafter; and at the end of ten years after the passage of this Act United States notes and Treasury notes then outstanding shall cease to be a legal tender for all debts, public and private, except for dues to the United States.

SEC. 11. That United States notes or Treasury notes once redeemed shall not be paid out again except for gold coin, unless there shall be an accumulation of such notes in the Division of Issue and Redemption which cannot then be canceled under the provision of this Act; in which case the Secretary of the Treasury shall have authority, if, in his judgment, that course is necessary for the public welfare, to invest the same, or any portion thereof, in bonds of the United States for the benefit of the gold reserve in the Division of Issue and Redemption, such bonds to be held in the aforesaid Division, subject to sale at the discretion of the Secretary of the Treasury, for the benefit of the said reserve in the said Division of Issue and Redemption, and not for any other purpose.

SEC. 12. That the Secretary of the Treasury shall be authorized to sell for gold, from time to time, in his discretion, any silver bullion in the Division of Issue and Redemption, and the proceeds of such sales shall be placed to the account of the gold reserve in the Division of Issue and Redemption aforesaid. That so much of section 2 of the Act approved July 14, 1890, entitled "An act directing the purchase of silver bullion and the issue of Treasury notes thereon, and for other purposes," as provides there shall be outstanding at any time no greater amount of the Treasury notes issued under the provisions of that act than the cost of the silver bullion and the standard silver dol-

lars coined therefrom, then held in the Treasury, purchased by such notes, be and the same is hereby repealed.

SEC. 13. That gold certificates and currency certificates shall, whenever presented and paid or received in the Treasury, be retired and canceled. All provisions of law authorizing the issue or reissue of gold certificates or currency certificates are hereby repealed.

SEC. 14. That no United States note or Treasury note issued under the act of July 14, 1890, of a denomination less than ten dollars shall hereafter be issued, and silver certificates shall hereafter be issued or paid out only in denominations of one dollar, two dollars, and five dollars, against silver dollars deposited in the Division of Issue and Redemption, or in exchange for silver certificates of denominations exceeding five dollars.

SEC. 15. That the Secretary of the Treasury may, in his discretion, transfer from any funds in the general Treasury not otherwise appropriated to the Division of Issue and Redemption any United States notes or Treasury notes which, on such transfer, could then lawfully be canceled under the provision of this act, if they had been redeemed on presentation; and when so transferred the same shall be canceled. And the Secretary of the Treasury, whenever there may be United States notes or Treasury notes in the general Treasury which are not available as surplus revenue, and which, upon transfer to the Division of Issue and Redemption could then lawfully be canceled under the provisions of this act, may exchange such notes with the Division of Issue and Redemption for gold coin, and such notes shall thereupon be canceled.

SEC. 16. That, to provide for any temporary deficiency which may at any time exist in the Treasury of the United States, the Secretary of the Treasury be and he is hereby authorized, at his discretion, to issue certificates of indebtedness of the United States, payable to the bearer in gold coin in five years, and redeemable in gold coin at the option of the United States after one year from their date, of the denomination of fifty dollars, or multiples thereof, with interest at a rate not to exceed 3 per centum per annum, and to sell and dispose of the same for lawful money at the Treasury Department and at the subtreasuries and designated depositories of the United States, and at such post offices as he may select. And such certificates shall have the like privileges and exemption provided in the Act entitled "An Act to authorize the refunding of the national debt," approved July 14th, 1870.

SEC. 17. That whenever money is to be borrowed on the credit of the United States, the Secretary of the Treasury is authorized, instead of issuing the usual forms of engraved bonds, upon receiving lawful money of the United States in sums of not less than fifty dollars in any single payment, to cause a record of such payments to be made in books to be kept for that purpose in Washington, and thereafter, from time to time, to pay to those so registered on such books, interest at a rate not exceeding 3 per cent. per annum, in gold coin, on the amount with which they shall severally stand credited on such books, in the same manner as if they were holders and owners of registered bonds of the United States, and he shall also pay to those so registered the sum due in gold coin, at the date of maturity of such inscribed loans. Suitable arrangements shall be made at each and every money order post office in the United States for receiving such payments into the Treasury on like terms, as well as for the transfer, on proper identification, of any inscription on the books in Washington, or of any part thereof, not less than fifty dollars. No interest shall accrue or be paid on inscriptions which shall have been reduced below fifty dollars. No charge of any kind shall be made by any department or officer of the government for any service in connection with the receipt or transmission of the lawful money, nor in the transfer of inscriptions on the books at Washington.

SEC. 18. That any national banking association organized under the laws of the United States shall, if its capital be wholly paid up and unimpaired, be entitled to receive from the Comptroller of the Currency circulating notes of denominations hereinafter provided, in blank, registered and countersigned as provided by law, to an amount not exceeding the amount of such paid up and unimpaired capital, after deducting therefrom its investment in real estate: *Provided*, That during the five years first succeeding the passage of this act, any national banking association receiving from the Comptroller of the Currency circulating notes in blank under the provisions of this act, shall maintain on deposit with the Treasurer of the United States, bonds of the United States to an amount, at a valuation computed as hereinafter prescribed, equal to that of the circulating notes so received, whenever such notes shall not exceed 25 per centum of the capital stock. And for each succeeding year after the expiration of five years from the passage of this act, the amount of bonds required to be deposited before issuing notes in excess of such deposit shall be decreased by 20 per centum of the original 25 per centum of capital

stock hereinbefore specified, and from and after the expiration of ten years from the passage of this act no such bond deposit shall be required. And no further deposit of bonds shall be required than is herein prescribed; and any national banking association having at any time bonds of the United States deposited with the Treasurer in excess of the amount required by law to be at such time deposited, may withdraw the whole or any part of such excess. But nothing herein contained shall be construed to authorize or permit the withdrawal of bonds required to be deposited under the provision of section 5153 of the Revised Statutes of the United States, as security for the safe keeping and prompt payment of public moneys deposited with any national banking association.

SEC. 19. That so much of the provisions of section 5159 of the Revised Statutes of the United States and section 4 of the Act of June 20th, 1874, and section 8 of the Act of July 12th, 1882, as provide that before any national banking association shall be authorized to commence banking business it shall transfer and deliver to the Treasurer of the United States, United States registered bonds, to an amount, where the capital is $150,000 or less, not less than one-fourth of its capital stock, and $50,000 where the capital is in excess of $150,000, be and the same is hereby repealed.

SEC. 20. That every national banking association shall at all times keep and have on deposit with the Division of Issue and Redemption for the purpose hereinafter specified a sum in gold coin equal to five per centum of its outstanding circulation. The amounts so kept on deposit shall constitute a fund to be known as "The Bank Note Guaranty Fund," which fund shall be held for the following purpose, and for no other, namely:—

Whenever the Comptroller of the Currency shall have become satisfied by the protest or the waiver and admission specified in section 5226, or by the report provided for in section 5227 of the Revised Statutes of the United States, that any association has refused to pay its circulating notes on demand in lawful money, he shall direct the redemption of such notes from the Bank Note Guaranty Fund aforesaid, and such notes shall thereupon be so redeemed. After the failure of any national banking association to redeem its notes shall have been thus ascertained, the bonds deposited with the Treasurer of the United States shall be sold, as provided by law, and the proceeds of such sale shall be paid into the Bank Note Guaranty Fund. The Comptroller of the Currency shall forthwith collect, for the benefit of said fund

from the assets of the bank and from the stockholders thereof, according to their liability, as declared by this act, such sum as, with the bank's balance in the Bank Note Guaranty Fund, shall equal the amount of its circulating notes outstanding. And for this purpose the United States shall, on behalf of the Bank Note Guaranty Fund, have a paramount lien upon all the assets of the association; and such fund shall be made good out of such assets in preference to any and all other claims whatsoever, except the necessary costs and expenses of administering the same.

SEC. 21. That whenever the Comptroller of the Currency shall ascertain what deficiency, if any, exists between the aggregate collections for the benefit of the Bank Note Guaranty Fund in the case of any failed bank and the amount of its outstanding notes redeemed and to be redeemed from the said fund, he shall assess such deficiency upon all the national banks in proportion to their notes outstanding at the time of the failure of such bank.

SEC. 22. That every bank going into liquidation, voluntary or involuntary, shall, prior to the payment of its creditors other than noteholders and the distribution of any of its assets to its shareholders, deposit with the Assistant Treasurer in charge of the Division of Issue and Redemption lawful money to the full amount of its outstanding notes, and shall, in addition, pay to the aforesaid Assistant Treasurer such assessment for the benefit of the Bank Note Guaranty Fund as the Comptroller shall judge to be requisite to meet such bank's liability for the reimbursement of the guaranty fund for any deficiency resulting from the payment therefrom of the notes of banks which shall have failed prior to the date when such bank shall go into liquidation.

SEC. 23. That the Secretary of the Treasury be and is hereby authorized, in his discretion, to cause to be invested in bonds of the United States any portion of the guaranty fund hereinbefore provided for; and such bonds shall be held and disposed of for the benefit of such fund.

SEC. 24. That all interest accruing from the investment of any portion of the aforesaid guaranty fund, and all funds received in payment of the duties on circulation provided for in this act shall be held in the Division of Issue and Redemption in gold coin or in United States bonds, in the discretion of the Secretary of the Treasury, and shall be a fund supplementary and in addition to the guaranty fund, to be used only in case said guaranty fund shall ever become insufficient to redeem any bank notes issued under the provisions of this act, and it

shall not be taken into account in estimating the amount of assessments necessary to replenish said guaranty fund or in repayment to banks of their contributions to the guaranty fund.

SEC. 25. That every national banking association shall pay, on or before the last day of every month, to the Division of Issue and Redemption, a duty imposed at the rate of two per centum per annum upon the average daily amount of its circulating notes outstanding in excess of 60 per centum of its capital stock, and not in excess of 80 per centum of such capital stock, and a duty imposed at the rate of six per centum per annum upon the average daily amount of such notes outstanding in excess of 80 per centum of its capital stock. Circulating notes of any national banking association shall be deemed and held to be outstanding whenever they shall have been supplied by the Comptroller of the Currency to such association, in blank, registered and countersigned according to law, and shall have not been returned to the Comptroller for cancellation or covered by an equal amount of lawful money deposited with the Assistant Treasurer in charge of the Division of Issue and Redemption for the retirement of such notes.

SEC. 26. That in order to enable the said Assistant Treasurer to assess the duties imposed by the preceding section, the Comptroller of the Currency shall, within five days from the first day of each calendar month, make a return to the said Assistant Treasurer of the United States, in such form as he may prescribe, of the average daily amount of circulating notes of each national banking association outstanding during the calendar month next preceding. And every national banking association shall be notified by said Assistant Treasurer of the United States within ten days from the first day of each calendar month of the amount of the duties upon its circulating notes due from it to the United States, under this Act, and every such association shall, before the last day of such calendar month, pay to the Division of Issue and Redemption in lawful money the full amount of such tax; and whenever any association fails to pay the duties imposed by this act, the sums due may be collected in the manner provided for the collection of taxes, or said Assistant Treasurer may reserve the amount so due out of the interest as it may become due on any bonds deposited with him by such defaulting association; and while such default continues no further amount of circulating notes shall be issued to such defaulting association.

SEC. 27. That every national banking association shall pay into

the Division of Issue and Redemption[1] each half year, in the months of January and July, on or before the thirtieth day thereof, a duty of one-eighth of one per centum upon the value of its franchise as measured by the aggregate amount of its capital, surplus, and undivided profits, upon the last day of the calendar month next preceding. Sections 5214, 5215, and 5216 and 5217 of the Revised Statutes of the United States are hereby repealed. But nothing in this section contained shall be so construed as in any manner to release any national banking association from any liability for taxes or penalties incurred prior to the passage of this Act.

SEC. 28. That the valuation of the bonds required by this Act to be deposited by national banking associations with the Treasurer of the United States shall be annually fixed, upon a basis of three per centum interest, by the Secretary of the Treasury, for each series of the bonds of the United States then outstanding and bearing a rate of interest exceeding three per centum. And such bonds shall be received upon deposit by the Treasurer of the United States at the valuation thus fixed by the Secretary of the Treasury. Bonds of the United States payable at the option of the Government shall be received upon deposit, under the provision of this Act, at ninety-five per centum of their market value. Bonds of the United States payable at a date named and bearing interest at a rate not exceeding three per centum per annum shall be received on deposit at their par.

SEC. 29. That the circulating notes furnished to national banking associations under the provisions of this act shall be of the denominations prescribed by existing law, except that no national banking association shall, after the passage of this Act, be entitled to receive or to issue or reissue or place in circulation any circulating notes of a less denomination than ten dollars. So much of section 5172 of the Revised Statutes as reads: "Express upon their face that they are secured by United States bonds, deposited with the Treasurer of the United States, by the written or engraved signatures of the Treasurer and Register, and by the imprint of the seal of the Treasurer; and shall also," is hereby repealed.

SEC. 30. That no national banking association shall count or report any of its own notes as a part of its cash or cash assets.

SEC. 31. That section 9 of the act of July 12th, 1882, entitled "An

[1] It was intended by the Commission that this tax should be paid into the fiscal department of the Treasury and not into the Division of Issue and Redemption.

Act to enable national banking associations to extend their corporate existence and for other purposes," be and the same is hereby repealed.

SEC. 32. That from and after the passage of this act the stockholders of every national banking association shall be held individually responsible for all contracts, debts, and engagements of such association, each to the amount of his stock therein, at the par value thereof in addition to the amount invested in such stock. The stockholders in any national banking association who shall have transferred their shares, or registered the transfer thereof, within sixty days next before the date of the failure of such association to meet its obligations, shall be liable to the same extent as if they had made no such transfer; but this provision shall not be construed to affect in any way any recourse which such shareholders might otherwise have against those in whose names such shares are registered at the time of such failure.

SEC. 33. That the fund of 5 per centum of outstanding circulating notes required to be kept on deposit by every national banking association for the redemption of the circulating notes of such association shall be in gold coin of the United States, and the Comptroller of the Currency shall, with the approval of the Secretary of the Treasury, have authority to provide for the redemption of national bank notes at any or all of the sub-treasuries of the United States.

SEC. 34. That so much of section 3 of the act of June 20th, 1874, entitled "An Act fixing the amount of United States notes, providing for a redistribution of the national bank currency, and for other purposes," as reads, "And when the circulating notes of any such associations, assorted or unassorted, shall be presented for redemption in sums of $1000, or any multiple thereof, to the Treasurer of the United States, the same shall be redeemed in United States notes," be amended to read, "And when the circulating notes of any such associations, assorted or unassorted, shall be presented for redemption in sums of $1000, or any multiple thereof, at the Treasury, or at such subtreasuries as may be designated by the Comptroller of the Currency, the same shall be redeemed in lawful money. But nothing in this Act contained shall be construed to impose upon the United States any liability for the redemption of the notes of any national banking association beyond the proper application of the redemption and guaranty funds deposited with the Division of Issue and Redemption, and the enforcement of the remedies by this act provided."

SEC. 35. That at least one-fourth of the reserve of twenty-five per centum of the aggregate amount of its deposits required under the provisions of existing law to be held by every national banking association in either of the cities designated as reserve or central reserve cities, and at least one-fourth of the reserve of fifteen per centum of the aggregate amount of its deposits required to be held by every other association shall consist of coin of the United States actually held in the vaults of such bank: *Provided*, That nothing in this section except as expressly provided shall be construed to alter or in any way affect the provisions of existing law governing the maintenance of reserves.

SEC. 36. That so much of section 3 of the Act of June 20th, 1874, entitled "An act fixing the amount of United States notes, providing for a redistribution of the national bank currency, and for other purposes," as provides that the fund deposited by any national banking association with the Treasurer of the United States for the redemption of its notes shall be counted as a part of its lawful reserve as provided in section 2 of the Act aforesaid be, and the same is hereby, repealed. And from and after the passage of this Act neither such fund of five per cent. nor any contribution to the Bank Note Guaranty Fund, provided for in section 20 of this Act, shall be counted by any national banking association as a part of its lawful reserve.

SEC. 37. That section 5138 of the Revised Statutes of the United States be amended to read as follows: "No association shall be organized under this title in a city the population of which exceeds fifty thousand inhabitants with a less capital than $200,000. No association shall be organized with a less capital than $100,000, except that banks with a capital of not less than $50,000 may, with the approval of the Secretary of the Treasury, be organized in any place the population of which does not exceed six thousand inhabitants, and that banks with a capital of not less than $25,000 may, with the approval of the Secretary of the Treasury, be organized in any place the population of which does not exceed four thousand inhabitants."

SEC. 38. That it shall be lawful for any national banking association to establish branches under such rules and regulations as may be prescribed by the Comptroller of the Currency, with the approval of the Secretary of the Treasury.

SEC. 39. That so much of section 5182 of the Revised Statutes of the United States, as provides that the circulating notes of national

banking associations shall be received at par for all salaries and other debts and demands owing by the United States to individuals, corporations, and associations within the United States, except interest on the public debt and in redemption of the national currency, be and the same is hereby, repealed.

SEC. 40. That section 324 of the Revised Statutes of the United States be amended so as to read as follows: "There shall be in the Department of the Treasury a Bureau charged, except as in this act otherwise provided, with the execution of all laws passed by Congress relating to the issue and regulation of currency issued by national banking associations, the chief officer of which Bureau shall be called the Comptroller of the Currency, and shall perform his duties under the general direction of the Secretary of the Treasury."

SEC. 41. That the examination of the affairs of every national banking association authorized by existing laws, shall take place at least twice in each calendar year, and as much oftener as the Comptroller of the Currency shall consider necessary in order to furnish a full and complete knowledge of its condition; and the person making such examination shall have power to call together a quorum of the directors of such association, who shall, under oath, state to such examiner the character and circumstances of such of its loans or discounts as he may designate; and from and after the passage of this Act all bank examiners shall receive fixed salaries, the amount whereof shall be determined by the Secretary of the Treasury. But the expense of the examinations herein provided for shall be assessed by the Comptroller of the Currency upon the associations examined. The Comptroller of the Currency shall so arrange the duties of national bank examiners that no two successive examinations of any association shall be made by the same examiner.

SEC. 42. That no association shall hereafter make any loan or grant any gratuity to any examiner of such association. Any association offending against this provision shall be deemed guilty of a misdemeanor, and shall be fined not more than $1,000 and a further sum equal to the money so loaned or gratuity so given; and the officer or officers of such association making such loan or granting such gratuity shall be likewise deemed guilty of a misdemeanor, and shall be fined not to exceed $500. And any examiner accepting a loan or gratuity from any association examined by him shall be deemed guilty of a misdemeanor, and shall be fined not more than $500, and a further sum equal to the money so loaned or gratuity given.

SEC. 43. That the Comptroller of the Currency, in addition to the reports provided for by existing laws, shall have authority to call for such other reports, regular or special, as he may deem advisable; and such reports shall be rendered in such form as the Comptroller may prescribe; and each association making such report shall cause a copy thereof to be conspicuously displayed in a public place in its banking house for the period of thirty days from the date of such report; but nothing herein contained shall be construed to require the publication of such additional reports by each association in the manner prescribed for other reports now rendered.

SEC. 44. That any national banking association heretofore organized may at any time within one year from the passage of this Act, and with the approval of the Comptroller of the Currency, be granted, as herein provided, all the rights, and be subject to all the liabilities, of national banking associations organized hereunder: *Provided*, That such action on the part of such associations shall be authorized by the consent in writing of shareholders owning not less than two-thirds of the capital stock of the association. Any national banking association now organized which shall not, within one year after the passage of this Act, become a national banking association under the provisions hereinbefore stated, and which shall not place in the hands of the Treasurer of the United States the sums hereinbefore provided, for the redemption and guarantee of its circulating notes, or which shall fail to comply with any other provision of this Act, shall be dissolved; but such dissolution shall not take away or impair any remedy against such corporation, its stockholders, or officers, for any liability or penalty which shall have been previously incurred.

SEC. 45. That any bank or banking association incorporated by special law of any state, or organized under the general laws of any state, and having a paid-up and unimpaired capital sufficient to entitle it to become a national banking association under the provisions of this act, may, by the consent in writing of the shareholders owning not less than two-thirds of the capital stock of such bank or banking association, and with the approval of the Comptroller of the Currency, become a national bank under this system, under its former name or by any name approved by the Comptroller. The directors thereof may continue to be the directors of the association so organized until others are elected or appointed in accordance with the provisions of the law. When the Comptroller of the Currency has given to such bank or banking association a certificate that the provisions of this

Act have been complied with, such bank or banking association, and all its stockholders, officers, and employés, shall have the same powers and privileges, and shall be subject to the same duties, liabilities, and regulations, in all respects, as shall have been prescribed for associations originally organized as national banking associations under this Act.

SEC. 46. That nothing contained in this Act shall be construed to alter or affect any vested rights of property or contract, or any penalties incurred before the taking effect of this Act or any part of it, and all provisions of law inconsistent with or superseded by any of the provisions of this Act be and the same are hereby repealed.

FINAL REPORT

PART I

METALLIC MONEY

FUNCTIONS OF MONEY.

1. Money is used to serve several different purposes, and by considering these separately clearness will be gained. In brief, these different uses of money may be defined as:

1) A Standard, or Common Denominator of Value.

2) A Medium of Exchange.

3) A Standard of Deferred Payments.

Under this head only the first two functions of money will be described. The third will be reserved for subsequent treatment. (Sections 21–44.)

2. The use of money as a standard naturally assumes first importance, and clear ideas as to its meaning are essential. It is necessary to ask, first, Why does a country need a standard of value? Obviously, every article possessing value can be compared with other articles having value only by reference to some given standard which itself possesses value. The value of a commodity, it should be said, is the quantity of another commodity, or other commodities, for which it will exchange. To be obliged to go through an arduous comparison of one article with every other article created would be an insuperable difficulty. "If a tailor had only coats, and wanted to buy bread or a horse, it would be very troublesome to ascertain how much bread he ought to obtain for a coat, or how many coats he should give for a horse. The calculation must be re-commenced on different data every time he barters his coat for a different kind of article, and there could be no current price or regular quotations of value. As it is much easier to compare different lengths by expressing them in a common language of feet and inches, so it is much easier to compare values by means of a common language" of dollars and cents. In short, a common denominator is as necessary in comparing the value of commodities as is a common language among many persons in any one city to enable them readily to compare ideas. Before

property can be conveniently traded in, or exchanged, its value must be expressed in terms of the standard money.

3. It is clear by referring one article to another, which has been chosen as a common denominator, that the one article is directly comparable in value with all others similarly so referred. The price of any article is the quantity of the standard for which it may be exchanged. For instance, on comparing a desk with gold, we find that it will exchange for the quantity of gold in twenty dollars; while a book purchases only that quantity of gold which is in one dollar. Thus we know the exact relations of the two articles to a third, used as a standard; that is, we know their prices; and we can compare their exchange values by comparing their prices. There can be no such thing, however, as the price of an article without a standard in which the price is expressed. Whenever a price is quoted, we all have a tacit understanding as to the standard with which the article is compared. In the United States, for example, from 1862 to 1879 prices were quoted in a paper-money standard; but since 1879 in gold.

4. Evidently an article having value cannot be compared with another which has no value. The value of anything is the quantity of other articles for which it will exchange. For example, a desk exchanges for twenty books; then a desk is twenty times as valuable as one book, or a book is one-twentieth as valuable as a desk. Each of these articles has value relatively to the other. One cannot compare wheat with air (which has no value); or, to express it mathematically, quantities compared with zero are incommensurate. Hence, whatever is used to measure purchasing power must itself have purchasing power. We measure length only by something having length; and capacity only by something having capacity. Likewise, we can no more estimate the value of things by comparison with a commodity which has no value than we can measure the distance from Chicago to Denver by bushels.

5. Value is a relation, not an absolute thing like length. That is, value is a ratio. If the value of a desk increases relatively to books, then it follows of necessity that books have

fallen relatively to a desk. It depends merely upon the side looked at, whether there has been a rise or a fall in value. When we state the price of wheat in the standard, say gold, we are comparing the value of wheat with gold; if the price of wheat rises we may correctly say, since wheat commands more grains of gold, either that wheat has risen, or that gold has fallen, in value relatively to the other. Consequently, there is no absolute measure of value as there is of length. A standard of value and a unit of length, like a yardstick, are wholly different in kind. A yardstick is an unvarying measure of length; but a metal, or any commodity, is not and never can be an unvarying measure of the relations of that metal or commodity to other commodities which are constantly changing relatively to each other. The very commodity chosen as a standard can be changed in value by causes affecting itself; and the other commodities (which are compared with the standard) can be changed by causes affecting them; so that the ratio of exchange with the chosen standard may be modified by causes affecting either or both terms of the ratio. It is inconceivable that any one article should alter exactly and in a compensating direction, with innumerable other commodities.

6. A wide difference should be made between the function of money as a standard and its function as a medium of exchange. A standard, whether it is a perfect one or not, is used to *measure* value; a medium of exchange is used to *transfer* value. The two processes are entirely distinct. The difference will be instantly seen by the analogy with weight: the machinery for weighing coal, the scales, does one duty; while that for transporting coal, the horses and wagon, does another duty. If, instead of coal, we think of all goods; and, instead of weight, we think of value (which is a relation), then money is used both as a measure of the value, and also as a means of exchange—although these two functions are quite distinct. In the case of value, an article, after being expressed in terms of the standard, is ready to be exchanged. But the one important idea to be kept firm hold of in all discussions of money, is that when it comes to exchanging goods, the metal chosen as the standard is

not necessarily used as the medium of exchange. If gold, for instance, is chosen as the standard by a country, it does not at all follow that gold is used in all the transactions requiring a medium of exchange. The failure to keep this point clearly in mind has been a stumbling block to many; and it has been wrongly supposed that an increase of transactions always required a proportional increase in the standard coin. But, if it happens that goods are in fact exchanged readily and safely by means of other things than the metallic standard, then such a conclusion is entirely unwarranted. If a man has wheat or shoes, how are they actually exchanged for other things, under existing methods? On this point, a few words of explanation may be necessary.

7. The first historical fact which confronts us is that in a society which has passed beyond the stage of barter, but which has not yet developed the habits of a modern commercial nation, money is usually passed from hand to hand in buying and selling. The commodity selected as a standard is then, also, practically the sole medium of exchange. But as soon as commerce develops, expedients arise for saving the expense and risk of using actual money. The Romans, although they had a considerable commerce, had but a slight acquaintance with bills of exchange. The early Italian and Jewish merchants brought them into general use and after the fourteenth century the forms, laws, and customs relating to them were much the same as in the present day.[1]

Given a standard in which the prices of commodities are expressed, the progress of commercial civilization for many centuries has been in the direction of devising new means of exchanging goods at a diminishing expense. The incentive behind this movement was a strong one. In transferring coin, itself possessing value, between persons in the same town, and above all between persons separated by great distances over sea and land, the cost of carriage and the still greater risk from loss

[1] "A bill is nothing but an order to pay money addressed by the drawer to the drawee, or person on whom it is drawn, specifying the amount to be paid, the time of payment, and the person to whom it is to be paid."—JEVONS, *Money and Mechanism of Exchange*, p. 300.

and robbery were obstacles to be removed if possible. There was thus a standing premium in favor of devising expedients by which the actual transfer of money was obviated, and later, expedients by which effective substitutes might permit exchanges to be carried on without the necessity for money. This stimulus to invention has always been present in commercial history, and is the cause of the development of ingenious and safe means of exchanging goods without the actual use of coin, or metallic money.

8. For these reasons banks came into existence, at first, as safe places of deposit. Under the principle of coöperation, a bank with its vaults could do for all persons cheaply what each person would otherwise at great cost have been obliged to do for himself. In early days, too, the banks created the means by which their depositors could, without withdrawing it, transfer the ownership of coin held in their names. Such methods as changes by entries on the books of the bank, or by certificates, furnish the fundamental idea in which originated the bank note. The notes of a bank, therefore, arose from a natural process, in the interest of the public, by which the risks and expenses of using actual coin were lessened. The bank note originated, not as a means of profit to the bank, but as a convenience and saving to the community.

Finally, during the present century, the banks were employed by customers to create what is now the most largely used medium of exchange in existence. Persons gave the banks legal control over property, or collateral, and in return the banks coined this property into means of payment by crediting the persons with a deposit-account on which checks or drafts could be drawn in terms of current money. The banks became responsible that this property should be quickly realizable in cash, and thus were able to pay lawful money on demand for these instruments whenever presented. In this way, through the form of a discount (or loan) at a bank, and a consequent credit in the form of a deposit-account, any man having marketable goods could obtain means of payment, and by checks, or drafts, and bills, meet any of his debts. Today, this medium of exchange is so

largely used that over 90 per cent. of the large transactions in the country are performed by it without the use of actual money. This will be more fully explained at a later point (pp 90–91).

9. Then, by a process of evolution, governments, without being the depositories of money or of property against which notes or certificates were issued, have at times put forth promises to pay, when they had no means of paying. This inferior medium of exchange has always conflicted with correct business methods, and has always given rise to misunderstandings and confusion. When banks create media of exchange the standard of the country remains unchanged; but when governments put forth paper money, almost invariably a depreciated paper money is substituted for the former metallic standard.

From the above facts, it is clearly apparent that the commodity chosen as the standard is not the only medium of exchange. On the contrary, the whole history of money is concerned with the development of expedients by which the use of the standard coin can be economized. And to such an extent has this gone on that in Anglo-Saxon countries, where commercial honor and intelligence are high, the use of bills of exchange, bank notes, checks, and drafts has reduced the actual handling of coin to very narrow limits, practically to those transactions in which — whether because of distrust, or because the operations are petty — coin is still passed directly from hand to hand. (See Section 12.)

10. In early times the different functions of money were not clearly developed in distinct form. The article chosen as the standard was commonly used as a medium of exchange. But as soon as confidence arose between merchants, the exchange of goods did not necessarily require the use of the standard as money. In deciding upon an article which best serves society as money, it was evident that such an article, in early times, must have (so far as one article possibly could) both the qualities demanded for a standard and those demanded for a medium of exchange. In our day, however, when so many substitutes are used as media of exchange to save the use of the standard com-

modity, it is not so necessary that the article chosen as the standard should possess all the qualities expected of a good medium of exchange. For the standard, as already explained, the chosen article should itself have (1) *value*, and so far as possible (2) *stability of value*. For the medium of exchange, it should possess (3) *portability*. That is, the value must be so related to weight and bulk of the material that the denominations of money in use shall not be inconveniently heavy, or inconveniently minute. To a poor people like that of India, where payments for services are necessarily of small amounts, the silver rupee is well suited; but in France and the United States, the five-franc piece and the dollar, are used; while for larger sums gold is required. Cheap and heavy substances like iron and copper are obviously unfit for a medium of exchange in these days, because of their lack of portability. The material used as money should also have (4) *indestructibility*. Perishable commodities like eggs and fish — although they have been so used — are not well suited to be passed about from hand to hand without suffering deterioration. Again, the substance of the money should be (5) *homogeneous*: that is, of the same quality throughout, so that equal weights would have the same value. Consequently such money could be melted up and divided, or put together again, without losing any of its material, or its value. This quality of (6) *divisibility* really confines the choice of money to certain metals. And lastly, the money should be made out of such a material that most persons can easily recognize it at sight; that is, it should have (7) *cognizability*.

11. Money can be obtained only by those who can get it in exchange for property of some sort or through the ability to render service. When persons who are hard pressed by poverty say that there is not money enough, they mean that they do not have wealth or property enough to satisfy their wants. Those who have marketable property have no difficulty in getting money. Of course, some kinds of property are more readily salable than others. Real estate, for example, is not as quickly changeable into money as cotton, wheat, or wool. Hence, owners of land can in general obtain money only from mortgage companies, or from

institutions especially created to deal in long-time loans. Ordinary commercial banks will advance means of payment, as a rule, only on property which is, in case of necessity, immediately convertible in the market. Holders of property salable on short notice, such as wheat or cattle, can obtain means of payment. The only limit to the amount of the medium of exchange they can obtain is the limit of their property. Of course, those who have no property and no services to offer, do not have the means of obtaining money. To remedy any supposed lack of money, they should adopt some means to produce or obtain more property. Those who have skill in producing goods can always get money. And, as elsewhere shown, the price of the articles they produce is fixed by comparison directly with the value of the standard, and not with the various devices used to exchange goods.

12. Any person, therefore, who had property quickly realizable, could easily get the means of payment at a bank by which to meet maturing indebtedness. And through the medium of exchange provided by a deposit-account and checks, he could make his payments without the use of actual money. This process might be extended, in principle, to all persons and to all transactions no matter how small. There are, however, some practical limits. If all persons were of high honor and intelligence, and if the transactions were large enough to warrant the trouble and expense of borrowing at a bank, there would be almost no use at all for actual money in exchanging goods. The only reason why men having little property have to pass money of value for small transactions is that they must offer in hand the thing of value, either because they are unknown or distrusted, or because the transaction is so small as not to be worth the trouble of borrowing, or of transferring a credit. This is today the reason why money in small denominations is in use in retail transactions ; and it is the reason why some money will probably always be used.

13. For large transactions — and increasingly even for smaller ones — little actual money is used among men of high commercial development. As business habits involving the use of the

check and deposit system develop, the need of actual cash diminishes Hence the fallaciousness of the reference to the per capita circulation in various countries. France, for example, has a larger per capita circulation than the United States; but this is due directly to the fact that the deposit and check system is little used in France, while it is highly developed in the United States. The French use instead, more bank notes and forms of actual money than we, because the use of deposits among the French is not so general as it is with us.

The use of per capita figures, so common in the discussion of this subject, springs from the idea that the more money a country has in use the better off it is. It is probable that the contrary is true. A country should not spend more of its resources than it can help on its media of exchange, any more than a farmer should spend more money than is necessary on raising his crop of wheat. A country should have all the media of exchange needed for its transactions; the work of exchange should be well done; but it should not be done in an unnecessarily expensive way.

14. In this connection, we may notice the demand which arises from some quarters for "more money." When this is not really a demand for more wealth, or capital, it shows a confusion of thought between the uses of money as a standard and as a medium of exchange. Very often, when it is said that more money is needed to exchange goods, to buy and sell wheat or cotton, a demand is supposedly made solely for an increase of the article chosen as a standard. But when we understand that exchanging can be done by other means than by the standard metal, we see that this demand is wholly unjustifiable. It is, however highly sensible as compared with the proposition to meet the demand for more media of exchange by increasing the number of standards. For as soon as a change in the standard is suggested, or a variety of standards offered, all the media of exchange, drawn in terms of the standard, become of uncertain value, are less acceptable, and so shrink in volume. Hence the last thing one who wished an enlarged volume of circulation should urge, would be an increase of the number of standards,

or raising doubt in any possible way as to what the standard shall be — whether it shall be gold, or whether it shall be silver. The only thing to be done is to lay firmly the foundations of that standard which has been chosen by the commercial world, in order that the most effective media of exchange in use by highly commercial countries may be expanded with the greatest ease and safety, and at the least cost to the public.

Any uncertainty as to the standard tends to contract the media of exchange in circulation. If there is doubt as to what article is to be the standard — whether it shall be gold or silver — then the one most valued will be hoarded (so long as the doubt continues); and as the standard coin is used as the basis of credits, it will be harder to get coin when so withdrawn from circulation, and thus shrinkage will be caused in all credits; loans will be hard to get; men having property will find it more difficult to obtain means of payment with which to meet coming obligations; production consequently falls off; less labor is employed, and trade and industry are curtailed. Whenever the government by its acts in any way creates doubt as to the standard, such doubt is certain to contract the media of exchange. In the United States this was done when inconvertible paper was issued, at which time the standard was changed from one of coin to one of fluctuating paper. Again, it produced similar results when our legislation on silver looked to a possible change from a standard of gold to one of silver of about one-half the value of the former. Lowering the quality of money reduces its efficiency. Keep the standard unshaken, and abundant media of exchange will arise whenever transactions require them. Look after the quality of the money standard and the quantity of media of exchange will look after itself.

15. Having thus sketched the functions of money, and having indicated the requisites which the money-material should preferably possess, the reader is given below in as brief form as possible, a statement of the various kinds of money now in use in the United States. From this array of facts, he may understand how much of the standard gold coin is employed as a medium of exchange, and what other media of exchange are in

use. It will be seen that by no means all of the gold in the country is in circulation as a medium of exchange, and that the gold itself is a very small part of the sum total of the currency.

STATEMENT BY THE UNITED STATES TREASURY OF THE CIRCULATION JANUARY 1, 1898.

	General Stock, Coined or Issued	In Treasury	Amount in Circulation January 1, 1898.
Gold Coin	$699,478,536	$151,910,176	$547,568,360
Standard Silver Dollars	455,818,122	394,327,049	61,491,073
Subsidiary Silver	76,400,207	10,679,899	65,720,308
Gold Certificates	38,128,149	1,570,460	36,557,689
Silver Certificates	387,925,504	11,229,912	376,695,592
Treasury Notes Act July 14, 1890	106,348,280	2,904,344	103,443,936
United States Notes	346,681,016	84,200,089	262,480,927
Currency Certificates	44,555,000	1,240,000	43,315,000
National Bank Notes	229,014,641	5,186,886	223,827,755
Totals	2,384,349,455	663,248,815	1,721,100,640
Gold Bullion in the Treasury		45,559,060	....
Silver Bullion in the Treasury		102,284,736	....
To which is to be added the Deposit-Currency			$3,210,735,758

Classifying these forms of money, together with the deposit currency, the relative quantities of our very diverse kinds of money are more clearly shown:

GOLD.		
Coin,	$547,568,360	
Certificates,	36,557,689	
		$584,126,049
SILVER.		
Dollar pieces,	$61,491,073	
Subsidiary coin,	65,720,308	
Certificates,	376,695,592	
		$503,906,973
GOVERNMENT DEMAND OBLIGATIONS.		
United States notes,	$262,480,927	
Currency certificates,	43,315,000	
Treasury notes of 1890,	103,443,936	
		$409,239,863

NATIONAL BANK NOTES, - - - - - - -		223,827,755
DEPOSIT CURRENCY.		
National banks October 5, 1897, -	$1,869,491,310	
State banks 1895–6, - - -	695,659,914	
Loan and trust companies, - -	586,468,156	
Private banks, - - - -	59,116,378	
		$3,210,735,758

In connection with their enumeration above there is given herewith a brief description of each kind :

(1) Gold Coins of the denominations of $20, $10, $5, and $2.50, weighing 25.8 grains to the dollar and .900 fine, or 23.22 grains fine gold. They are a "legal tender in all payments at their nominal value when not below the standard weight and limit of tolerance provided by law for the single piece, and, when reduced in weight below such standard and tolerance, a legal tender at valuation in proportion to their actual weight;" receivable for all public dues and formerly exchangeable for gold certificates. Gold bullion is admitted to free coinage. By the act of February 12, 1873, it was enacted that the one-dollar gold piece, "at the standard weight of 25.8 grains, shall be the unit of value."

(2) Gold Certificates, now issued under the act of July 12, 1882, for gold coin deposited in the Treasury, in denominations of $10,000, $5000, $1000, $500, $100, $50, and $20; not a legal tender; "receivable for customs, taxes, and all public dues," and redeemable in gold at the Treasury or any subtreasury.

(3) Standard Silver Dollars, each containing 412.5 grains of standard silver .900 fine, or 371¼ grains of pure silver, coined for government account; "a legal tender at their nominal value for all debts and dues, public and private, except where otherwise expressly stipulated in the contract;" receivable for all government dues and exchangeable for silver certificates.

(4) Subsidiary Silver, coined for government account in denominations of 50, 25, and 10 cents, .900 fine, containing 25 grammes to the dollar (or 385.809 + grains standard silver, or 347.228 + grains of pure silver); "a legal tender in all sums not exceeding $10 in full payment of all dues, public and private;" receivable for government dues to $10, and exchangeable for lawful money at the office of the Treasurer or any Assistant Treasurer of the United States in sums of $20 or any multiple thereof.

(5) Minor Coins, coined on government account in denominations of 5 cents and 1 cent; a "legal tender at their nominal value for any amount not exceeding 25 cents in any one payment;" receivable to the amount of 25 cents for all governmental dues; and redeemable in

lawful money at the office of the Treasurer and the several Assistant Treasurers and depositories of the United States when presented in sums of not less than $20.

(6) Silver Certificates, issued against standard silver dollars, in denominations of $1,000, $500, $100, $50, $20, $10, $5, $2, and $1; not a legal tender for debts, public and private; receivable for customs, taxes, and all public dues; exchangeable for standard silver dollars or smaller coin, and redeemable in standard silver dollars.

(7) United States Notes (greenbacks), issued under the acts of February 25, 1862, July 11, 1862, and March 3, 1863, in denominations of $1, $2, $5, $10, $20, $50, $100, $500, $1000, $5000, and $10,000; a "legal tender in payment of all debts, public and private, within the United States, except for duties on imports and interest on the public debt;" redeemed when presented since January 1, 1879, in gold coin at the subtreasuries in New York and San Francisco, and reissued.

(8) Currency Certificates, issued under the act of June 8, 1872, in denominations of $5000 and $10,000, upon deposit of United States notes, payable to order, and not a legal tender, nor receivable in exchange for anything other than legal-tender notes; but available as lawful reserve by national banks.

(9) Treasury Notes, issued under the act of July 14, 1890, in payment for silver bullion; a "legal tender for all debts, public and private, except where otherwise expressly stipulated in the contract;" receivable for customs, taxes, and all public dues, and "redeemable on demand in coin" at the office of the Treasurer or any Assistant Treasurer of the United States. There were issued in all $155,931,002, but cancellations have reduced the amount to $106,348,280, on January 1, 1898.

(10) National Bank Notes, issued by the national banks of the United States in accordance with the act of June 3, 1864, to the extent of 90 per cent. of the par of government bonds deposited by such banks with the Treasury; not a full legal tender; receivable at par "in all parts of the United States in payment of taxes, excises, public lands, and all other dues to the United States, except duties on imports; and also for all salaries, and other debts and demands owing by the United States to individuals, corporations and associations within the United States, except interest on the public debt and in redemption of the national currency;" receivable also by every national banking association for any debt or liability to it; and redeemable at the Treasury of the United States (in United States notes).

(11) The Deposit Currency appears as the credit to depositors in the banks; and on these sums as given above, checks, drafts, and the like, are drawn, creating a medium for exchanging goods, which, as shown by the clearing-house returns of the United States, performs transactions annually to the large sum of more than $50,000,000,000. Not a legal tender for any payments whatever.

16. After getting possession of the facts as to the various kinds of money in the United States, and the denominations of each, it will add to a proper understanding of the existing situation to discover the work done by each of these forms of money. There are several tests at our disposal, and these will be treated in the following order:

(*a*) The classified receipts by the banks on given days.

(*b*) The kinds of money used in retail trade.

(*c*) The money used in international payments.

In 1871, at the request of James A. Garfield, then Chairman of the Committee on Banking and Currency of the House, the Comptroller obtained returns from fifty-two banks selected from three groups, namely, largest city banks, banks in smaller cities, small country banks. The figures showed that of all the receipts over the counters of those banks ($157,000,000) only 12 per cent. ($19,370,000) was in coin or notes, and 88 per cent. was in checks, drafts, and commercial bills.

In 1881, 1890, 1892, and 1896 more careful examinations were made, showing the following results as to the percentages of the different kinds of money actually used by the people of the United States in their dealings with banks:

Dates	No. of banks	Gold coin	Silver coin	Paper currency	Checks, drafts, etc.	Total
June 30, 1881	1966	0.65%	0.16%	4.06%	95.13%	100%
September 17, 1881	2132	1.38	0.17	4.36	94.09	100
July 1, 1890	3364	0.89	0.32	6.29	92.50	100
September 17, 1890	3474	1.13	0.43	7.40	91.04	100
September 15, 1892	3473	0.88	0.41	8.10	90.60	100
July 1, 1896	5530	0.60	0.50	6.30	92.50	100

17. Also the actual average percentage of checks and credit instruments used in making payments in retail trade, has been shown by the Comptroller of the Currency to be about 55. In short, over one-half of the retail trade is performed by banking expedients. And since of large transactions over 90 per cent. are likewise done without the usual forms of money, it has been shown that, taking the mercantile business of the country as a

whole, retail and wholesale, over 80 per cent. of all the money work is done by checks, drafts, and other credit instruments.[1]

18. A brief glance at the immense amounts of our international trade also shows that very large transactions are settled by relatively small sums of metallic money. Taking merely the figures for 1896, it is found that the exports and imports of merchandise and of gold and silver coin and bullion were as follows:

Total exports, merchandise,	$882,606,938	
Total imports, merchandise,	779,724,674	
Total merchandise		$1,662,331,612
Total exports gold coin and bullion,	112,409,947	
Total imports gold coin and bullion,	33,525,065	
Total gold,		145,935,012
Total exports silver coin and bullion,	60,541,670	
Total imports silver coin and bullion,	28,777,186	
Total silver,		89,318,856
Total gold and silver,		$235,253,868

From this table it appears that in settling transactions amounting to $1,662,331,612, all told, gold and silver coin and bullion (including ore) were used to only about 14 per cent. Since much of this gold and silver bullion was itself sent as merchandise, the real percentage is much less than 14.

[1] See *Report of Comptroller of Currency 1896*, and KINLEY, *Journal of Political Economy*, March 1897.

19. In the preceding sections, attention has been confined to the two functions of money known (1) as the Standard or Common Denominator of Value, and (2) as the Medium of Exchange. Concerning transactions begun and ended on the spot nothing more need be said; but the fact of contracts over a period of time introduces a new and important element — the time element. Whenever a contract is made covering a period of time, within which serious changes in the economic world may take place, then difficulties may arise as to what is a just standard of payments. Various articles might serve equally well as a standard for exchanges performed on the spot, but it is not so when any one article is chosen as a standard for deferred payments. Without much regard to theory, the world has in fact used the same standard for transactions whether settled on the spot, or whether extending over a period of time.

20. In order to work with perfection as a standard for deferred payments, the article chosen as that standard should place both debtors and creditors in exactly the same absolute, and the same relative, position to each other at the end of a contract that they occupied at its beginning; this implies that the chosen article should maintain the same exchange value in relation to goods, rents, and the wages of labor at the end as at the beginning of the contract, and it implies that the borrower and lender should preserve the same relative position as regards their fellow producers and consumers at the later as at the earlier point of time, and that they have not changed this relation, one at the loss of the other. This makes demands which any article that can be suggested as a standard cannot satisfy. And yet it is a practical necessity of society that some one article should in fact be selected as the standard. The business world has thus been forced to find some commodity which — while admittedly never capable of perfection — provides

more nearly than anything else all the essentials of a desirable standard.

21. The causes which may bring about changes in the relations between goods and labor, on the one side, and the standard, on the other, are various. We may, for instance, compare wheat with the existing gold standard. The quantity of gold for which the wheat will exchange is its price. As wheat falls in value relatively to gold, it exchanges for less gold, that is, its price falls; or, *vice versa*, gold exchanges for more wheat, and relatively to wheat gold has risen. As one goes up, the other term in the ratio necessarily goes down; just as certainly as a rise in one end of a plank balanced on a log necessitates a fall in the other end of the plank. Therefore, changes in prices can be caused by forces affecting either the gold side or the wheat side of the ratio; by forces affecting either the money standard or the goods compared with that standard. Consequences of importance follow from this explanation. First, suppose that commodities and labor remain unchanged in their production and reward, respectively; then, anything affecting the supply of and demand for gold will affect in general the value of gold in comparison with goods and labor. Or, second, if we suppose an equilibrium between the demand for and supply of gold, then, prices and wages can be affected also by anything affecting the cost of obtaining goods or labor. It is one-sided to look for changes in prices solely from causes touching gold, or one term of the price ratio. If, however, it should be desired that prices should remain stationary, then this can be brought about only by finding for the standard an article that would automatically move in extent, and in the proper compensating direction, so as to meet any changes in value arising not only from causes affecting itself, but also from causes affecting labor and the vast number of goods that may be quoted in price. No commodity ever existed which could thus move in value.

22. For the moment, let the money side of the price ratio be regarded as unchanged and constant, in order to discuss some changes on the side of goods and labor. First of all, attention

is called to a most remarkable industrial movement, indeed, one so great and striking, that it has never been paralleled in the economic history of the world. Never has there been such a widespread movement of invention and progress in the arts and sciences as in the last three or four decades of the nineteenth century. On every side and in every industry we have witnessed an unequaled progress in invention, in labor-saving devices, in new processes of extracting and manipulating the raw materials of the earth, in opening up vast new areas producing food and other commodities, the marvelous development of ocean and land transportation, the cheapened cost of carriage, the commercial rise of telegraph and telephone communication by which quotations in any one market are instantly known in every other market of the world, the concentration of production and lessened cost of management—all of which have revolutionized the cost of producing every article of daily consumption from the simplest kitchen utensil to the great traveling crane or the modern express train. In the last few decades, then, great material causes have been at work which in themselves, quite independently of any forces on the money side of the ratio, would have been able to make very great changes in the prices of goods and in the position of labor. The word labor is used advisedly, because, exactly as the world has been able to increase its efficiency in production and in obtaining satisfactions for mankind at less effort, the same labor and sacrifice has given forth a larger result. This explains why today labor commands in wages more for a day's work than at any time in the previous history of the world.

In view of the great progress made in the latter part of this century, it is natural to suppose that great changes should have taken place in the cost of obtaining a wide range of articles, even of food and extractive products. The blind struggle of great masses of men against the movement above described, which took its form in a lowered range of prices, is undoubtedly the cause which has given rise to the discussions of the present time about prices and silver. Yet unconsciously, the operation of these industrial changes has been largely overlooked, and

attention has been almost wholly directed to the changes on the money side of the price ratio.

23. In looking about for the most desirable standard, it is at once clear that the ratio between the standard commodity, on the one side, and goods and labor on the other, may be changed during the time of a contract running long enough to allow changes to take place either in the standard or in goods and labor. It has been explained in what way prodigious changes can operate on the side of goods and labor. Now, it is fitting that the possibility of change on the money side of the ratio should be presented, and compared as to rapidity and exten with those of goods and labor.

In the first place something must be said as to the possibility of rapid changes in the standard metals, gold and silver. Because of their durability, all the gold and silver ever produced (except losses by abrasion, shipwreck or the like) still remains. This is a matter of great moment. After a long continued period of production the total supply, of gold, for example, assumes very large proportions as compared with the annual output. Hence changes in the annual production have a relatively small effect on the total mass in existence. The effect produced is somewhat like that of adding a barrel of water to Lake Michigan; it does not perceptibly raise the level of the lake. From this fact it follows that when the existing supply of gold has become very large, moderate changes in demand for it do not produce any material change in the value of the whole of the large mass in the world. A falling off in the demand would be dissipated over the whole of a large quantity; a considerable increase in the demand (even if not at once balanced by an increased supply) must be distributed over the whole mass already in existence. Consequently, owing to the durability of the precious metals, they accumulate to such an extent, that ordinary changes in demand and supply cannot immediately produce any rapid or even perceptible change in their world value. If it be desirable to select for a standard a material which is least exposed to changes in its own demand and supply (so that prices would be least affected by changes in the money term of the price ratio), then

we understand why in the past, in obedience to this principle of selection, the precious metals have been invariably adopted as a standard of prices by commercial nations. And it is safe to assume that, when serious changes of price take place in short periods of time, they are assignable to forces operating rather on the side of goods than on that of the precious metals. For instance, the existing supply of wheat is, roughly speaking, the annual supply; and a change in the demand for or supply of wheat can produce rapid and extreme fluctuations in its value and price. No one should think of their being due to changes in the world mass of gold in which the price of wheat is expressed—at least not the changes going on in short periods of time. Likewise, anyone must know that the fall in the price of steel rails in recent years from $56 to $18 per ton, has been due to the introduction of new and cheaper methods of production, and not to changes on the gold side of the price ratio—especially since labor has received increased gold wages.

24. The world, as above described, has witnessed the sweep of a great economic movement over the field of industrial life in the latter half of this century. The events of this period have been such as to produce great changes in the value of any standard of deferred payments. The force of this current underneath industry has been steadily going on, its drift not well understood, but its disturbing influences on contracts everywhere felt. This is the reason why agitators have been able to create so much stir by the discussion of the standard. It must, however, be clear how impotent are the remedies proposed by these persons to counteract these great economic changes. To coin more silver dollars, or for the government to print more demand notes, will not change the disposition and ability of the country to produce commodities at a lowered cost. This disposition and ability arise from the character of the people and our great natural resources. Merely to increase the quantity of money while preserving its value in gold will not change the relations of commodities in general to gold. The price of an article in gold will be maintained at that ratio which expresses its value relatively to the value of gold in the markets of the world. Moreover, the total mass of gold in the

world must be changed in value in order that the price of goods shall be changed by influences affecting the gold side of the price ratio. For any single nation, it will be practically a physical impossibility to effect such a change, and even if the gold side of the ratio can be successfully manipulated, that will not dispose of the fact that changes in prices may arise from modification of cost on the commodity side of the ratio. Even then the problem of a standard of deferred payments will not have been settled.

25. Having arrived at the conclusion that, owing to their durability, the precious metals are least likely to vary in value on account of changes affecting themselves, the choice of a standard lies between gold and silver. We cannot have two different standards of value at the same time, without having two sets of prices. Also, if both gold and silver, united together in some form of international bimetallism, could be welded into a double standard, it is clear that there would still be changes between this combination standard and the commodities compared with it. That is, even if gold and silver are bound together, changes in prices relatively to them must necessarily take place if changes occur in the costs of production of articles exchanged against this double standard. Granting all that may be asserted by the advocates of international bimetallism, conceding that the values of gold and silver may be maintained at a fixed ratio to each other, it must be evident that the problem of a standard of deferred payments is not thereby solved; because it does not follow, even if gold and silver can be successfully tied together, that they together will always maintain the same exchange relations and the same level of prices with labor and with all other commodities — which we know are constantly changing in cost.

26. Moreover, we are forced to believe that bimetallism, national or international, is impracticable. If we are thus — as seems to be inevitable — forced to set aside the plan of attempting to regulate the values of gold and silver at some ratio, then the choice is between a single gold, or a single silver, standard. There can be no halfway place, if both gold and silver are given free coinage, under our present mint laws. As long as these two metals

vary in value relatively to each other (without here going into the reasons why they so vary), it is impossible to use both gold and silver as a standard of prices. If given weights of each metal are coined into a legal dollar (for example, 23.22 grains of pure gold, and 371¼ grains of pure silver), then as soon as the market values of gold and silver differ from the mint relation, we have dollars of different values. Under such circumstances, Gresham's Law begins to operate. The operation of this law is really a very simple matter. The owner of the cheaper metal, supposing it to be silver, has two ways to dispose of it, either in the form of bullion, or in the form of coin. If silver has become cheaper, then it is over-valued at the mint. Thus silver in the form of coin, would buy more gold than it would in the form of bullion, consequently, silver will be sent to the mint to be coined. Gold is treated quite the reverse. Gold being the dearer, it is undervalued at the mint. Gold in the form of coin would buy less silver than it would in the form of bullion; hence, gold will be changed from coin to bullion and sold in the general market. The result is, if both are placed on the same basis at the mint, the cheaper metal, silver, will rush to the mint, and the dearer metal, gold, will be driven from coinage. In short Gresham's law operates: the cheaper money, whenever there is free coinage of both, drives out the dearer.

27. So long as it is impracticable to use gold and silver jointly as a double standard, and so long as gold and silver vary in value relatively to each other, it is impossible to use both metals as a standard. Any attempt to do so, as has been shown again and again in our own history, will result in a single standard of the cheaper of the two metals. This brings the controversy about the standard to a clear issue. It was found that, for several reasons, our choice was restricted to either gold or silver. Shall it be gold, or shall it be silver? It must be either one or the other.

To some it might appear that silver has shown a disposition to follow the general tendency of goods to fall in value, and that therefore it is a fairer standard on which to settle long contracts. Omitting here the discussion as to the justice of a stand-

ard so constituted, it does not appear that silver has kept with goods in such a uniform way as would warrant us in choosing it as a standard because of this characteristic.

For many years a tendency had manifested itself to subtract a previously existing demand from silver, until a situation was created such that the great total mass (large in comparison with the annual production) found little to support its value. So enormous a change in the attitude of the world towards silver finally created a condition in the market for silver which made it sensitive to sudden changes of demand. Losing a great part of its monetary demand, this large mass became heavy in value, and in its downward movement it showed the possibility of sudden rushes as it fell (like an avalanche) from one point of support to another lower down. In 1876, silver within a few months declined and rose relatively to commodities to the extent of fully 25 per cent. Again in 1890, under a gigantic speculative movement silver rose nearly as many per cent., followed by the greatest fall in the whole history of the precious metals. In a little over three years (from August 1890 to March 1894) silver fell to one-half its former value. Such fluctuations in a precious metal in short periods of time without corresponding fluctuations in the cost of producing goods totally unfit that metal to act as a standard of deferred payments even for short contracts.

28. No such sudden and erratic changes have taken place in the exchange value of gold relatively to goods. Whether it be due to prejudice or not is immaterial; the fact remains that the business interests of the world have in recent years preferred gold to silver whenever they could get it. An increase in the world's supply of gold has thus been followed by its extended use even to the extent of discarding silver. That is, let there be an increase in the quantity of gold and a corresponding increase of demand seems to follow owing to the concurring habits of commercial countries. On the other hand, increase the quantity of silver and it does not at all follow that there will be an increasing demand for it which will cause gold to be discarded. The monetary history of the world since 1850 gives strong evidence of the truth of these statements. This has been the reason why

even with a vastly increased production of gold there has been steadiness in its value. The increasing supply has been followed by an increasing demand; and this may go on so long as there are nations to discard silver and take up gold. The conclusion, therefore, is irresistible that since it is desirable to choose a commodity as a standard which fluctuates least in its exchange value in short periods of time, for reasons affecting itself, gold must be that commodity. It must be chosen by any commercial country which proposes to trade with the great civilized countries. A country must keep in touch with the great commercial movements of the day and furnish to the buyers and sellers a stable standard of prices, just as Venice did of old and England does today; if a country does not it is certain to lose some of its trade to its rivals.

29. The great increase in the production of gold since 1850 has now, so far as supply is concerned, a steadying influence on its value, for reasons previously given. A conservative estimate gives the total available stock of the world in 1850 at about $2,000,000,000. In the last forty-seven years (1851–1897) gold has been produced to the amount of over $6,000,000,000; so that, even allowing a deduction of $2,000,000,000 for loss by shipwreck, abrasion, use in the arts, etc., the total supply is now more than three times that in 1850. Tripling the supply of almost any other article would have enormously lowered its value. The reason why this fall in the value of gold did not take place is due to the preference of the business world for gold as compared with silver. The abundance of new gold enabled many countries to discard silver, thereby opening up a new demand for gold. But there is good reason to believe that any new demand thus created did not equal the new supply; because we find a fall in the value of gold as compared with a day's labor. Labor today exchanges for more gold than at any previous time in history.

By the side of the abundance of new gold there has developed the phenomenal progress of the arts, previously described, by which the expense of obtaining nearly all goods of common consumption has been greatly cheapened. If gold itself had not come to be obtained more cheaply, prices would have fallen

more than they have. But the interesting point is that, as compared with human labor, gold has depreciated. If gold had risen in value relatively to both labor and goods there might be some plausibility in the contention that it was "scarce." The great gain to the laborer at the close of this century is the fact that his labor exchanges for more gold, and that in addition gold exchanges for more of the comforts and necessaries of life. To those of the wages-receiving class it is of the first importance that the commodities they buy have fallen in price and doubly so because at the same time gold in which wages are paid has also fallen relatively to labor. The fall in the prices of goods, therefore, is not only an advantage in itself as evidence of the easier acquisition of commodities we need, but it is no evidence of the scarcity of gold. On the contrary, the supply of gold has been tripled within forty-seven years, and, other things remaining the same, gold would have fallen in value; but all kinds of goods have also been obtained more cheaply than ever; so that the resultant of these movements on both sides of the price ratio has been to offset each other somewhat. There has been greater ease of acquisition of both gold and goods (as shown by the wages of labor), but goods have cheapened somewhat more than gold; hence, the resulting fall of prices coincident with the rise in the gold price of labor.

30. Standards, moreover, are not discovered or created by governments: they are adopted by the latter. People of all nations and all conditions, civilized and savage, have more or less exact standards of value by which they measure property and services. An African wishes certain things in exchange for his goods or his labor and has roughly in his mind the amount that he should receive. He has arrived at this standard not by express agreement with his fellow savages, but by the concurrence of the habits of the members of the tribe. And so we go on through various stages of civilization and we find that at various times men in this way have created standards of value. Governments sometimes have adopted them, but not always; sometimes they have attempted to change them, and such attempts have invariably been followed by disastrous results. Therefore

it is manifestly the duty of government to ascertain what the standard of the people whose business it wishes to promote may be, and then by law adopt that standard. If it does not do this it might better leave the whole subject alone and let the standard take care of itself, as it will do under the play of natural forces arising from the habits of the people.

The business interests of the country regard the choice of gold as the standard by the greatest modern commercial nations as a natural evolution of the commodity fittest for that purpose. We are dealing herein with facts and not with theories. In so far as this standard has been evolved by the concurrence of practical men of affairs in the conduct of commerce and industry, it is the duty of the state not in any way to interfere with this choice. The mere fact that gold is the standard of most commercial nations is sufficient ground why the government should not attempt to establish another standard, especially since this fact is an evolution of business and not of politics. Any legislation, therefore, which operates to deprive the business community of the standard which has been chosen with reference to business considerations is a blow aimed directly at the prosperity of trade and industry. Such action would be the same in effect as a measure to cut the farmer off from the use of improved implements, or to cut the whole business world off from the use of improved transportation methods.

31. Although there is no commodity that will serve as a perfect standard of deferred payments where any considerable time elapses between the beginning and maturity of a contract, it is obvious that some standard must be chosen. As things go in a modern commercial nation, contracts are necessarily made running over a considerable period of time. The fulfillment of these contracts often becomes a question of judicial arbitrament, and hence the state, through its courts, must be able to declare what must be accepted as a legal acquittal of debts. There must, therefore, be an accurate legal interpretation of monetary terms. And it follows from what has been said that the standard adopted for this purpose by government should be that selected by commerce.

32. During long periods of time — within which gains in mechanical skill and invention, revolutions in political and social habits, changes in taste or fashion, settlement of new countries, opening of new markets, may take place — great alterations in the value of the standard may occur wholly from natural causes affecting the commodity side of the price ratio. And yet, in default of a perfect standard, persons who borrow and lend create debts and obligations expressed in terms of that article which has been adopted as the standard by the concurring habits of the commercial community of which they form a part. It should be understood, whenever men enter into obligations reaching over a period of time, that a necessary part of the risks involved in this undertaking is the possibility of an alteration in the exchange values of goods, on the one hand, and in the standard metal on the other, due to industrial changes and natural causes. This is one of the risks which belong to individual enterprise, differing in no way from other possibilities of gain and loss. For instance, prices rose, as indicated by an index number of 100 in 1860 to an index number of 216 in 1865. Therefore, in the United States, in this period of rising prices the creditor lost and the debtor gained. On the other hand, from 1865 to 1878, prices fell from 216 to 101, and in this period of falling prices the creditor gained and the debtor lost. It is to be observed, however, that these figures refer to actual quotations of prices during the fluctuations of our paper money. But it is evident in such movements as these, that parties to a time-contract must take their own chances of changes; and indeed it is much more wholesome that they should do so.

It should be kept well in mind that it is not a proper function of government to step in and save men from the ordinary risks of trade and industry. It goes without saying that if changes in the value of the standard due to natural causes take place during the continuance of a contract, it is not the business of government to indemnify either party to the contract. This is a matter on which every individual who enters into time obligations must bear his own responsibility. The inefficient or shortsighted person who fails to take the risks of

industry and contracts into account has no ground of appeal to the government for assistance. A government should no more appear in such cases to remedy the inefficiency of business men than to indemnify them for losses occurring in business, due to lack of judgment in other directions. Any attempt, therefore, to change the burden of responsibility from the individual in industry, to the government, in such a case, is an exaggerated form of socialism. It is a plea for government help to make up for individual weakness. Hence the attempt, through governmental control over the currency, to regulate prices artificially, and thereby to make a redistribution of property.

33. In this connection some consideration should be given to the economic position of debtors and creditors in society, and some estimate may be given of their relative values to society. It is known, of course, that all merchants are constantly borrowing. Nearly every man in business is a borrower and a debtor. It is also true that every bank is also a debtor to the full extent of all its deposits and notes. In our modern complex commercial organization, all this is legitimate; but the fundamental distinction between a debtor and a creditor assumes importance in another form, as may be seen by taking a typical example.

Most salaried persons lay up something for their families or for old age, by saving out of their moderate incomes. If such a person has succeeded in saving perhaps one thousand dollars, he would naturally wish to invest it at interest. He has made this saving by foregoing the expenditure of that amount of money for satisfactions to his family or to himself. By going without these comforts and satisfactions he would naturally wish to obtain some future advantage. He loans his money on interest, for example, to the builder of one of our great city office buildings. The borrower, under the agreement, is given the power to consume whatever that $1,000 will buy. Is he, after expending that $1,000, exempt from any moral (to say nothing of legal) obligation to return the loan to the lender according to agreement? When the borrower entered into the agreement he took the risk connected with it. The act of making the loan was a voluntary one on his part. Now, in case the building does

not rent so well as he expected it would, and his use of the $1,000 produces nothing in its place, does that free him from his obligation to the lender? Is there any reason why the thrifty lender, on a small salary, should obtain no return for his long and painful sacrifice because a builder has been inefficient? Certainly not.

The man who borrows money for investment in any undertaking will have the profit thereof; and it is therefore quite proper that he should assume the risk of loss. The lender specifically waives all claim to profits in excess of the designated interest, on the condition that he shall be relieved from all risk of loss. If he is not to be relieved from these risks, then there is no reason why he should not also have the profits.

34. Coinage of silver is sometimes urged as a means of aiding debtors. If silver is to be used in unlimited quantities, when at a value different from gold, it is clear that this ought to be done only in such a way as would place each metal on its own foundations. Were the government to manufacture silver coins and merely certify their weight and fineness, and enforce contracts made payable in such coins, then people could use silver as a standard of deferred payments if they chose to do so. It would not be necessary to fix upon any ratio to gold.

If a particular name were assigned by law, or even by custom, to a definite weight of gold so that when contracts mention that name, there can be no doubt as to what is meant, there would be no necessity for conferring upon gold any further legal tender quality. So, too, if a different name, not easily confused with that assigned to the gold unit, should be assigned to a unit consisting of a definite weight of silver, so that contracts expressed in such units would be interpreted and enforced with certainty as to the meaning of the terms, there would be no need of further legal tender laws.[1] If it be true, as is so often contended, that

[1] Every contract would then carry with it the precise terms of its fulfillment. An award of damages could be expressed by a jury in either standard without more trouble than is involved in reaching a verdict now; for, there being at any given time an ascertainable ratio between the two standards, any damages found could be easily expressed in either standard indifferently. At a time when 31 ounces of silver was worth one ounce of gold, it would be immaterial whether an award of damages was

silver has kept in value closely to commodities for long periods, and that it would for this reason be a better standard of value, silver could in this way be voluntarily agreed upon by those who borrow and lend, if it were preferred by them to gold. Then all members of the community could have the alternative of using gold or silver, as might be agreed upon. Perfect justice to all portions of the people demands that each should have the privilege of performing its transactions in the way most serviceable to itself. If tied together by a legal ratio, the poorer of the two metals will drive out the better; but, if not tied together in any way, whichever furnished the better standard would unquestionably come into general use through the concurring habits of business men; the poorer would be discarded, just as the better tools supplant the poorer. Those who wish to use gold, therefore, should have the same rights as those who wish to use silver.

35. So far it has been assumed that the standard of deferred payments must be a single commodity, and it has been shown that no single commodity can render perfect justice as between debtors and creditors in deferred payments. It has been urged, however, that a much greater approximation to justice would result if long-time obligations should be satisfied by taking as a unit not one commodity, but a large number of commodities. This is the principle of the Multiple Standard. Under this plan the sum of the money prices of a long list of commodities upon a given date, say 1870, is ascertained. Suppose that this amounts to $1,000; and that at another period, say 1890, the prices of the same quality and quantity of the same articles are again added up, and amount, we will suppose to $900. The theory of the Multiple Standard is that the debtor should return to the creditor that amount of money which will buy exactly the same quantity and quality of commodities that the debtor received at the beginning of the contract. In the case supposed above, the debtor would return to the creditor that amount of money ($900) which would buy in 1890 the same quality and quantity

expressed as 100 ounces of gold or 3100 ounces of silver; the real damages awarded would be the same, just as any definite temperature is the same whether expressed in Centigrade or in Fahrenheit.

of commodities that he could purchase with the $1,000 received in 1870.

So far as the change in values of commodities relative to gold has been due to the progress of the arts and to invention, the gains of society as a whole are thus transferred to the debtor. The theory of justice in the Multiple Standard is based on the assumption that the creditor should have only the same quantity and quality of goods at the end as at the beginning of the contract; but if, during the continuance of the contract, advances in the arts have enabled society to produce these goods at less cost, it cannot be contended that this result has been due to the individual exertions of either the creditor or the debtor. The case is nearly the same as that of the unearned increment from land which is derived from the growth of the community and not from any effort on the part either of the landlord or the tenant. By the Multiple Standard, of course, the gains of society would be transferred to the debtor. The question naturally arises, then, which of two parties to the contract—to neither of whom the changes of price are due—is the most deserving person to whom the gains of society should go.

It is to be observed that the Multiple Standard, as ordinarily proposed, does not include the prices of labor, of rent, and the like. So that, even if it might preserve unchanged relations as concerns merely the quantity of goods, it would not bring about the same relations as concerns the purchasers of labor. When it is remembered that a very large part of expenditure is for labor, the inclusion of this element in a standard might properly work to counterbalance any inference as to the value of the standard drawn solely from the prices of goods. If the price of labor were to be given its relative importance in a Multiple Standard for recent years, it might appear that prices as a whole had not fallen at all.

36. Moreover, if a Multiple Standard and a silver standard were provided for voluntary adoption by the side of a gold standard, and granting that in a régime of falling prices the two former would throw the gain entirely to the debtor and the latter to the creditor, it is evident that these facts would be taken account

of by both parties to a contract in fixing on the rate of interest. The borrower could get his loan at a lower rate under the gold standard, and only at a higher (and compensatory) rate under the Multiple Standard, or the silver standard. So that, if none were obligatory, the result to the borrower would work itself out much the same whether one or the other standard were used.

It should be kept clearly in mind that whenever a country wishes to provide its citizens with a multiple standard by which the above operations may be carried on, it is quite within its power to do so. By publishing authoritative quotations of prices and giving the official valuation of a multiple unit each day, each average of the week, month, and year, it would be possible for any person, voluntarily, to enter into contracts based upon this standard. The choice of the multiple standard or the gold standard would then be open to all who were willing to make contracts with one another. It would be a matter of free choice which they would adopt, and the choice of the standard would be a part of the bargain on which the transaction was based. In no wise, however, should the government make it impossible for any citizen to use either standard at his discretion. And that standard which in fact has been evolved by the development of commercial habits should not be displaced so long as it is demanded by commercial usage.

THE STANDARD IN THE UNITED STATES.

37. Upon the establishment of the Mint of the United States in 1792, provision was made for the coinage of both silver and gold at a ratio of 15 to 1 — the silver coins to contain 371¼ grains of fine silver to the dollar, and the gold coins 24¾ grains of fine gold to the dollar. In selecting this ratio, Alexander Hamilton, then Secretary of the Treasury, appears to have been actuated by a desire to secure the concurrent circulation of both gold and silver through the adjustment of the legal ratio so as to approximate the actual market ratio.[1] Finding it difficult or

[1] "There can hardly be a better rule in any country for the legal than the market proportion, if this can be supposed to have been produced by the free and steady course of commercial principles. The presumption in such case is, that each metal

impossible to ascertain, without much delay, the market ratio current throughout the countries of the commercial world, he had directed his attention to the relative values of gold and silver in this country alone, and found that the silver dollars in circulation were of varying weights, but that "$24\frac{6}{8}$ grains of fine gold have corresponded with the nominal value of the [silver] dollar in the several states, without regard to the successive diminutions of its intrinsic worth." The Spanish silver dollars in circulation (which he had ascertained to exchange currently for 24¾ grains of fine gold), varied in weights from 368 grains to 374, or a mean ratio of about 15 to 1, which he recommended as the coinage ratio, though he himself said that it was "somewhat more than the actual or market proportion, which is not quite 15 to 1." Therefore, starting with the gold dollar as 24¾ grains of fine gold, the silver dollar was made to contain fifteen times as much, or 371¼ grains of fine silver.

Events proved, however, that although the actual market ratio in the commercial world had been in the past—as stated by Hamilton—a little less than 15 to 1, it did not long remain so. After 1793, the price of silver fell very materially, and the result was the establishment of the single silver standard instead of the gold standard, or a double standard.

By 1820, the fact that the monetary system of the United States was on a silver basis—that the "dollar" which was the standard meant 371¼ grains of fine silver and not 24¾ grains of gold—was too patent to escape discussion. The gold coins had been drained off—being too valuable to circulate on a par with silver. The commercial ratio between gold and silver in the years 1810 to 1833 averaged 15.66 to 1—at which the gold dollar was worth \$1.044. The ratio in 1833 was 15.93 to 1—at which valuation the gold dollar was worth \$1.062. These prices, of course, are expressed in silver, which had become the standard of value; that is, prices were measured in this metal and it was this which was referred to whenever the word "dollar" was used.

finds its true level, according to its intrinsic utility, in the general system of money operations." See HAMILTON'S *Report on the Establishment of a Mint* (*January 1791*); *Reports of the Secretary of the Treasury;* Washington, 1837, Vol. I, p. 141.

38. In consequence of this loss of gold from the currency and with a view so to adjust the ratio that gold would once more be brought into circulation, the act of June 28, 1834, reduced the weights of the gold coins. Instead of 24.75 grains they were made to contain 23.2 grains of pure gold to the dollar—a coinage ratio of 16.00215 to 1. At the average commercial ratio of the year 1833, the gold dollar of the new coinage was worth 99.55 cents as measured by the existing silver standard. The coinage ratio, however, was now greater than the commercial ratio, which in the year 1834 was but 15.73 and in the subsequent decade varied from 15.62 to 15.93—averaging 15.78. Gold was then overvalued in the coinage, as silver had been before 1834, and the silver was driven from circulation, being more valuable as bullion than as coin. Thus the gold coins became the standard of value; the word "dollar" which had previously meant 371¼ grains of fine silver, came to mean 23.2 grains of gold; and the monetary system of the United States passed from the silver to the gold basis. By the act of January 18 1837, providing for uniform fineness of both gold and silver coins the standard was again changed very slightly. In conformity to that act, the weight of gold coins was increased from 23.2 grains to 23.22 grains of fine gold to the dollar—making the coinage ratio of the two metals 15.9884 to 1. This was the establishment of our present gold standard.

After the passage of the act of 1834 prescribing a coinage ratio by which silver was undervalued and driven out of circulation the actual standard of value in the United States down to the year 1862 was gold. The silver dollar was worth as bullion, in these years from $1.01 to $1.05 as measured in the standard gold. Prices of commodities were measured in gold, and it was gold coin which was meant when "dollars" were mentioned, because the business world had learned that the silver coins were worth too much to pass as dollars.

39. With the passage of the legal-tender acts in 1862 and 1863, however, the standard was again altered. The word "dollar" no longer meant 23.22 grains of gold. It had become a government's promise to pay that amount of gold—a promise the value

of which fluctuated with every change in the credit of the government and every change in the prospect of a definite fulfillment of the promise. During the succeeding seventeen years all prices were measured in this fluctuating paper standard. As the standard depreciated, prices rose — but after the close of the war, its value increased with every additional indication that the time when the promise would be fulfilled was approaching. The value of the standard in fact appreciated toward the point from which it had departed in 1862, and upon the resumption of specie payments on January 1, 1879, the currency system again rested upon a gold basis and our standard was once more gold.

40. In 1873, however, came the legislative recognition of gold as the sole legal standard, as it had been the actual standard, of value. By the coinage act of February 13, 1873, it was provided "that the gold coins of the United States shall be a one-dollar piece, *which at the standard weight of twenty-five and eight-tenths grains, shall be the unit of value;* a quarter eagle," etc. And although subsequent legislation, in 1878 authorizing the coinage of the silver dollar piece, and in 1890 discontinuing the coinage of the gold dollar piece, may have occasioned some confusion as to what is now to be regarded as the legislative definition of our standard, there cannot be the slightest doubt that, quite irrespective of the metals of which our coins have been made, the actual standard of our present monetary system is and has been since January 1, 1879, 23.22 grains of fine gold and that it is this standard in which all prices have been measured and in terms of which contracts have been drawn.

41. The reason why some definite legislative declaration, as recommended by the Commission, should be made in order to remove all possible doubt as to whether "coin" means gold or silver in the payment of our national bonds, is connected with the refunding act of July 14, 1870. The question as to whether United States bonds could be paid off in greenbacks was settled by the election of General Grant in 1868, followed by the act of March 18, 1869 which solemnly pledged the faith of the United States to pay all its obligations in coin. When the large public debt was refunded at a lower rate of interest by the act of 1870,

it was provided by this statute that all the bonds issued under its regulations should be "redeemable in coin of the present standard value" (that is, the standard in 1870). The whole interest-bearing debt of the United States of the present day is governed by this law; since those issued under the terms of the Resumption Act of 1875 also followed the act of 1870. Inasmuch as the silver dollar piece was a legal standard coin in 1870, even though not in circulation, it is contended that as between individuals contracts payable "in coin" might be satisfied by either silver or gold coin. Even in such a case, however, the question would very properly be raised as to what was contemplated by the parties to the contract. But the bonds of the United States represent not contracts between individuals, but contracts between a government and individuals. Such a government cannot be forced to pay its debts in any kind of money unless by the power of a stronger government; but its credit at home and abroad depends upon its reputation for honesty and fair dealing in such matters, and considerations of public policy, as well as justice, therefore demand that no advantage shall be taken of technicalities as a shield for partial repudiation of indebtedness. Even if there might be a fair question raised by the private debtor as to the interpretation of such a contract, there should certainly be none raised by the government. It should not hesitate in announcing its intentions to fulfill its obligations in their spirit. The only coin in contemplation in 1870 and 1875 was gold coin, and gold coin or its full equivalent has been received by the government for all bonds which have been sold since.

THE LAWS OF TOKEN MONEY.

42. The recourse in recent years of several great countries to what has been termed the "limping gold standard" presents several cases where two metals circulate at par interchangeably, the one having a value of pure metallic content much below its nominal face value. The futile attempts to keep two metals with free coinage in concurrent circulation at different market values have resulted in a considerable use of silver, which still possesses an unlimited legal-tender power. The best known instances are the United States with its silver dollar piece, and France with its five-franc piece. The principles by which such coinage of inferior value is maintained at its face value in gold demand full explanation.

In almost all points, such money as is referred to above corresponds to the character and functions usually ascribed to token coins; but where it is clothed with unlimited legal-tender power and where large amounts are outstanding, there are seemingly very great discrepancies between such money and token coins. To make the matter quite clear, therefore, it will be well first to outline the nature of token coinage. As now understood and practiced, a correct system of token money would conform to the following principles:

1. Such a reduction in weight and value below the standard unit as would prevent exportation and yet not place a premium on counterfeiting.

2. Coinage only on government account; that is, no free coinage.

3. Limited legal-tender power.

4. Protection against excessive quantity by direct redemption on presentation in proper amounts, which also maintains its face value.

43. As a matter of course, countries have not always had clear conceptions regarding this kind of money, so that the

principles just enumerated have come forth only by a process of evolution out of experience. For example, in the United States the first rule was not observed until 1853; not until it was discovered that the same causes which led to the disappearance of the dollar piece (of 371¼ grains pure silver) soon after 1834 also removed the subsidiary coins (two halves or four quarters, etc., then also containing 371¼ grains pure silver). This was the reason why we were driven to such shifts to use foreign coins for small change. In 1853, our subsidiary coins were reduced to 345.6 grains of pure silver for two halves, four quarters, or ten dimes. This reduction in weight by about 6 per cent. kept the bullion value of the token coins below that of both the gold and silver dollars, and they circulated freely. They were worth more as small change than as bullion.

As regards the second law it is evident that if coins are issued at a value above the cost of the bullion in them, the issuer gains this profit, or seigniorage. Hence the coinage should not be allowed to a private person but should be restricted to the state, to which the profits should accrue. This is all the more necessary if the duty is laid upon the state to redeem the coins upon demand.

The reason for the third law is obvious. The standard coins being ordinarily issued only in multiples of a unit, there must frequently be fractional sums represented in a debt; and the same considerations which demand that the kind of money to satisfy the major part of the debt shall be clearly defined in law, also require that some method of legally satisfying the fractional portions should be indicated. Consequently, the token coins are made legal tender for this purpose. On the other hand, a payment of a debt in large amounts of over-valued coins, these being of small denomination and hence heavy and cumbrous in large sums, would be a serious inconvenience. If, therefore, the legal-tender quality conferred on token coins were unlimited, the power might be abused by a captious debtor, who might insist on making some large payments in these coins for the purpose of annoying the creditor. Minor and subsidiary coins have usually been made a legal tender, therefore, only to lim

ited amounts. In 1853 subsidiary silver coins, which hitherto had had full legal-tender power, were made payable for debts only in sums not exceeding five dollars. In 1879 this limit was raised to ten dollars.

44. A person obliged to make remittances abroad might have been paid here in over-valued token coins, which, not being worth in foreign countries more than the bullion they contained, would be short payment and could not be used abroad. Unless he could exchange token coins for full-valued standard coins which would be equally good abroad as well as at home, he would find business decidedly venturesome. Consequently the necessity for the fourth law becomes at once apparent. Indeed, redemption is a fundamental necessity for a system of token coins. Inasmuch as no government can ever foretell the amount which the community will absorb, it must be ready to freely provide token coins in exchange for standard coins whenever needed; and to prevent an excess from clogging the tills of merchants it must be equally ready to pay out standard coins in exchange for token coins whenever the latter are sent in to the Treasury. Thus free exchange of token coins for gold and of gold for token coins, is the only proper method by which an excess in quantity is automatically prevented. If wanted, they are obtainable; if redundant, they are inevitably withdrawn. Without a method of redemption direct or indirect, token or debased coins would certainly go to a discount if issued to excess, because, not being received equally with standard coins, a discrimination against them would manifest itself. Not having in themselves a value equal to their face value, they must borrow the deficiency only from the process by which they can be exchanged at par with full-valued coins. By the act of 1879 subsidiary coins may be exchanged for lawful money in sums of twenty dollars and multiples thereof.

In addition to the removal of excessive issues from the circulation, redemption of token coins performs an important function in the distribution and redistribution of such coins as are needed. Without redemption, nickels, for example, would accumulate in large amounts on the hands of the street car com-

panies; for it would be inconvenient or impossible for these companies to find those who might want small change, and it would be difficult for them to get rid of large accumulations at full value. But the system of redemption offers the means whereby those who have too much can dispose of their surplus, and those who have not enough can get more. The Treasury thus acts as a distributor of the supply of token coins.

Lastly, the community will need only a limited amount of token coins for small change. What this sum will be can be determined only by experience. No one can foretell how many dimes or quarters will be needed in the daily transactions in which money is necessarily used. There must, therefore, be freedom in issuing all that is wanted. Safety is to be found in a prompt redemption of those which the public do not need. In small denominations a very large number of pieces may be required, but the total value may be inconsiderable; for larger denominations of no greater number of pieces the total sum may be quite important. The inconvenience of not having money for large and small change is so great that if the government did not provide it in a form that will circulate (as before 1853 and again in July 1862) some substitutes are necessarily provided by merchants. The demand for token coins is therefore, up to a certain limit, strong and steady, and if the issues are within this limit there will be no net redemption. The coins presented by one individual or class will be withdrawn by others for use in the channels where they are wanted.

45. The limitation of the laws of token coinage to denominations below one dollar is purely artificial, being based on the idea that two half dollars would circulate in a way different from two one dollar pieces. Or, to put it another way, it is untrue to say that "change" is wanted only in denominations below one dollar. In fact, retail transactions—being those in which, if at all, money passes from hand to hand—require the use of one dollar and two-dollar, if not five-dollar denominations as much as they do those of quarters and halves and for exactly the same reasons. Then, if it should happen that the coins, or money, of denominations above one dollar in general use for "large

change" should be over-valued (as in the case of our silver dollar piece to the enormous extent of, perhaps, 55 per cent.) we have in these forms of money qualities exactly similar to those of all token coins, and the same principles govern their issue and circulation.

46. The difference between the value of the bullion in a coin and its face value is called the seigniorage. The name took its origin from the usage of the lord or seignior, who took a profit on the coinage of the metals brought to his mint. Properly speaking it should be no greater in the case of standard coins than the expense of coinage. In the United States since 1875 coinage of gold has been made gratuitous, that is without any charge for manufacturing the coins.

Seigniorage has been used as a term to cover more than the mere cost of coinage; being used to indicate the sum, be it large or small, by which the face value exceeds the market value of the bullion in the coin. In any instance where the seigniorage includes anything beyond the cost of coinage, we have a case of token coins. In short, the existence of a seigniorage is the essential characteristic of token coinage. Hence our silver dollar piece with a seigniorage today of over 55 per cent. is even more distinctly a token coin than two half-dollars were in 1853, with a seigniorage of only about 6 per cent. Of course at the present time our fractional coin has a seigniorage of nearly 60 per cent. The reduction in value in 1853 of about 6 per cent. to prevent exportation and melting has now, because of the fall in silver, extended to nearly 60 per cent., thus establishing an enormous premium on counterfeiting.

47. The circulation of silver five-franc pieces in France at par with gold furnishes a most interesting case of token coinage. These coins have a seigniorage of over 50 per cent. To many it seems inexplicable that they should circulate at their face value. On examination, however, it will be found that they owe their value to the ordinary laws of token coins. They are highly necessary for change, and large amounts of them are certain to be needed for this purpose. Bank of France notes, the only paper money, are issued generally in large denomina-

tions; and hence leave the field for currency of smaller denominations wholly to gold and silver. Although gold five-franc pieces are authorized they have not been coined since 1870; indeed since that date almost no gold coins below twenty francs have been minted. A large field in the circulation has thus been given over to be occupied by the five-franc silver pieces, and between $200,000,000 and $400,000,000 of them have been thus kept in circulation outside the Bank of France.[1] The quantity has been restricted to a sum no greater than is demanded by the needs of the community for the purposes of large change.

Most important of all, however, to their maintenance at par is the system of redemption, which will be found to be much like the redemption of the silver dollars in the United States. In the first place, if there were any redundancy in general circulation the excess would promptly be removed by the system of quasi-redemption, which requires all the state treasuries, as

[1] In 1890 M. de Foville, Director of the French Mint, by a method of his own (see *Journal de la Société de Statistique de Paris*, January 1886) estimated the total silver stock of France, including subsidiary coin, at 2,500,000,000 francs (approximately $500,000,000). Later he stated the exact distribution of the standard silver coin circulating in France as follows:

	In circulation (000,000 omitted)	In bank (000,000 omitted)	Total (000,000 omitted)
French silver five-franc pieces, - -	606 fr.	794 fr.	1,400 fr.
Belgian silver five-franc pieces, - -	112	233	345
Italian silver five-franc pieces, - -	155	173	328
Greek silver five-franc pieces, - -	8	7	15
Swiss silver five-franc pieces, - - -	3	4	7
Total, - - - - -	884 fr.	1,211 fr.	2,095 fr.

These estimates received the support of Dr. Soetbeer. M. Ottomar Haupt, however, has made a much higher estimate. According to his figures, the situation in 1892 (see Haupt: *Monetary Situation* in 1892, p. 130) is as follows:

	In circulation (000,000 omitted)	In bank (000,000 omitted)	Total (000,000 omitted)
French silver five-franc pieces, - -	1,800 fr.	924 fr.	2,724 fr.
Foreign silver five-franc pieces, - -	160	340	500
Total, - - - - -	1,960 fr.	1,264 fr.	3,224 fr.

Other estimates have been made by competent persons. M. Haupt believes that the figures as stated by him in 1892 have, until recently at least, remained substantially correct. As no striking monetary changes have since taken place, the silver circulation, whatever it may amount to, has probably not materially altered during the past five years.

well as the Bank of France, to receive the five-franc silver pieces at their face value equally with gold. That is, they are as good as gold for all payments to these institutions, which afford an outlet for any which may be in excess of the needs of circulation. The Bank of France is not obliged to directly redeem silver in gold, but so long as the gold reserves of the Bank are large and increasing in comparison with silver, it is evident that there is no danger of the silver flowing into the bank in quantities sufficient to weaken the gold basis on which the bank now firmly stands. While there is no direct redemption in gold, the indirect redemption works sufficiently well in normal times. Both gold and silver are received in unlimited amounts on equal terms; and in payments by the bank, while gold is skillfully accumulated, there is practically no discrimination against silver. So long as France retains her present gold standard, the bank will be able to keep silver at par with gold, and her large gold reserves are the immediate proof of this ability.[1]

The general security as to the redemption of silver coins is, however, obtained by protection for the future. The only reason why the Latin Union at present holds together is because of the existing provisions of the Treaty in regard to the ultimate redemption of its own silver coinage by each member of the Union. In case the Union is dissolved, it has been agreed by all the states that each state shall redeem all the silver five-franc pieces which it has emitted at the nominal or face value of the coins. These measures, known of all men, give assurance that in cases of emergency the ultimate redemption in gold of the silver circulation is assured.

The five-franc pieces of France, therefore, although having

[1] While for ordinary sums there is usually no difficulty in obtaining gold from the Bank of France, the policy of the institution to preserve a large gold fund leads it to charge a slight premium on sums of any magnitude wanted in gold for exportation. But this charge has not exceeded one-tenth of 1 per cent., and is often much less. This policy does not operate as a positive prohibition to obtaining gold, but as a slight deterrent, sufficient to turn applicants to other sources if they can obtain gold at lower rates elsewhere. Yet it is to be understood that the gold can be had of the bank, in case of real need, on payment of the slight premium. It is by such methods as these that the gold reserves of the bank have been favored, and yet any real discrimination against silver is practically avoided.

unlimited legal tender power, circulate according to the rules of token coins, as described above. They bear a seigniorage (of over 50 per cent.); they are limited in quantity; their further coinage is suspended; and their quantity in circulation is kept at the needed amount by redemption, as above described, and by the promise of absolute and final redemption in gold in case the Latin Union be dissolved.

48. The case of the American silver dollar is very similar to that of the French five-franc piece. The reason why our silver dollar circulates at par is to be found in our observance of the principles of token coinage. It will be seen that the silver dollars conform to all the requisites of token coins; they bear a seigniorage (of over 50 per cent.); their coinage is only at the will of the government; their quantity is limited by suspension of further coinage to a sum probably no greater than is needed for large change; and there exists a very effective system of indirect redemption.

The need of silver dollars for purposes of change must ever be limited by the amount which the community, from its own preferences, will use. The silver pieces themselves cannot be used in large quantities, as has been proved by the constant and indefatigable efforts of the Treasury to put them into circulation. In order to get silver dollar pieces into circulation Congress appropriated the means to pay for shipping the coins free of charge to any part of the United States. To cover this cost the Treasury has already expended over $1,000,000; and yet the highest figures for the circulation of silver dollar pieces was $67,547,023 in December, 1890; while for years the sum has remained below $60,000,000. During the fiscal year 1897 the Treasury paid out and shipped to various points about $72,500,000 in silver coin (including subsidiary silver coins as well as dollars), at an expense, for express charges alone, of $81,500; but the channels of circulation were already so filled with silver coin that more could not be absorbed, and the consequence was a return of $73,200,000 to the Treasury, thus resulting in a net decrease of $700,000 in the actual circulation of silver coin.[1]

[1] The details as to this movement are indicated in the following table:

Since our people would not carry heavy coins, the only way in which their circulation could be assured was to issue silver certificates in small denominations. The public would take silver certificates when they would not use silver dollar pieces. In 1886, silver certificates in denominations below ten dollars were authorized. The competition of other small paper money had already been removed by the withdrawal of one- and two-dollar

MOVEMENT OF SILVER COIN DURING THE FISCAL YEAR ENDING JUNE 30, 1897.

[In millions of dollars.]

Office at	Balance July 1, 1896	Received	Paid	Balance June 30, 1897	"Shipments" included in "paid"
Washington	152.4	3.7	3.0	153.1	1.7
New York	49.7	23.5	19.9	53.3	3.1
Boston	2.8	3.7	3.8	2.7	2.9
Philadelphia	11.1	7.9	6.7	12.3	3.1
Baltimore	6.8	2.5	3.1	6.2	.2
Cincinnati	1.3	4.0	3.9	1.4	3.3
St. Louis	18.9	8.3	7.3	19.9	5.9
Chicago	3.4	9.8	9.4	3.8	8.4
New Orleans	5.5	6.0	9.8	1.7	9.3
San Francisco	25.7	3.8	3.3	26.2	2.5
	277.6	73.2	70.2	280.6	40.4
Mints	116.7	21.2[1]	2.3	135.6	1.2
Total	394.3	94.4	72.5	416.2	41.6

[1] This amount includes new coinage.

RÉSUMÉ.

Balance in Treasury and Mints June 30, 1896,	$394.3		
Receipts,	73.2	$73.2	
Coinage,	21.2		
	$488.7		
Paid and shipped,	72.5	72.5	
Balance of silver coin in Treasury and Mints.	$416.2		
Net inward movement,		$0.7	
Expense of movement, express charges only,			$81.500

OUTSTANDING.

Silver coin, June 30, 1896,	$112.3	
Silver coin, June 30, 1897,	111.6	
Net decrease of circulation,		$0.7

United States notes. In this way an increasing work was provided for the silver currency, so that it was not in supply beyond the demand for purposes of large change, and it ceased coming back to the Treasury to such an extent as formerly. That is, the supply of the silver circulation being determined by the requirements of the acts of 1878 and 1890, new demands were created for it, owing to the withdrawal of other kinds of money. This was also aided by the very large contraction in the circulation of the National Banks. In these ways the silver coinage, having a large seigniorage, was kept in quantity equal to the need for large change. And the danger that an increasing quantity would transcend even the demand created by withdrawal of other currency was removed by the cessation of further purchases of silver, November 1, 1893.

49. But the important fact which maintains the silver dollar pieces at par with gold, and reduces the amount in circulation to the actual needs of the community for change, is the existing system of redemption. This redemption, however, is not direct. There is no law requiring the Treasury in express terms to redeem the silver dollars in gold. But there is a system of indirect redemption which, in practice, proves almost as effective as a specific requirement.[1] In all payments to itself, the Treasury receives silver on an equality with gold; and in all payments from itself to others it provides gold, if that metal is desired; but in no case does it force silver upon an unwilling person.

[1] How this indirect redemption is accomplished is clearly shown in the following extracts from the *Report of the Secretary of the Treasury* in 1887:

"Provision should be made against a time when there may be more of that form of money [silver dollars] than is required for the business of the country. The first symptom of this will be increasing ownership of silver by the government; this increase will take place because the government pays to the people that kind of currency which they wish to have and receives from them that kind which they wish to pay; consequently the government will accumulate the form of money which the public least desires. If the government held no funds save those needed for its daily expenses, it would perform no different function toward currency when it had once coined or printed it than does an individual who receives and pays out money; but the two great trust-funds — that for the redemption of United States notes ($100,000,000), and that for the redemption of national-bank notes, at present more than $100,000,000 — and whatever surplus there may be from time to time, form, as it were, a reservoir which takes and holds that kind of currency which the people reject.

This indirect method of redeeming silver, and thus maintaining its value at par with gold, by taking out of circulation and locking up in the Treasury any surplus, has been given a support by legislation so worded that while not ordering direct redemption of silver dollars in gold, it puts an obligation on the Treasury so clear and undoubted that if silver were not maintained at par with gold it would be a distinct violation of statute. In the act of July 14, 1890, it was declared to be "the established policy of the United States to maintain the two metals on a parity with each other upon the present legal ratio, or such ratio as may be provided by law." This policy was reaffirmed by the act of November 1, 1893, discontinuing purchases of silver bullion, which required the equality between gold and silver coins to be "secured through international agreement, or by such safeguards of legislation as will insure the maintenance of the parity in value of the coins of the two metals, and the equal power of every dollar at all times in the markets, and in the payment of debts."

The statutes above quoted and the practice of the Treasury, therefore, have effected a process of redemption of silver in gold, which has all the force of a direct system.[1]

Were it not for this great government reservoir, a redundancy of any form of currency would be shown either by its exportation to countries where it was needed or by its depreciation here. The silver dollar cannot be exported, because the silver of which it is made is worth less than 75 cents, which would be its value for exportation.

"The government has always kept those dollars and their certificates as valuable as they were when it paid them out by receiving them in payment of taxes; but sometimes it has been obliged to receive them in greater amounts than the people were willing to take them. This was notably the case in 1884, 1885, and 1886, when they so accumulated that at the end of July 1886 there were $93,959,880 of them in the Treasury. During those years these funds in the Treasury formed the reservoir which held the silver dollars that the people did not want, and thus prevented those which they did want, and still held, from going to a discount, or, in other words, from becoming worth less to the people than they were when the government originally paid them out of its Treasury."

[1] How this is regarded by the Treasury may be seen in a letter from Mr. Carlisle, when Secretary, to James P. Helm, Louisville, Ky., in September, 1896: "With a knowledge of these assurances, the people have received these coins and have relied confidently upon the good faith of their government, and the confidence thus inspired has been a most potent factor in the maintenance of the parity. The public has been satisfied that, so long as our present monetary system is preserved, the governmen

50. The actual needs of the country for money of the various denominations can be seen in the following table:

PAPER CURRENCY OF EACH DENOMINATION OUTSTANDING DECEMBER 31, 1897.

Denomination	United States notes	Treasury notes of 1890	National bank notes	Gold certificates	Silver certificates	Total
$1.00...	$2,754,763	$15,346,889	$350,536	....	$31,538,550	$49,990,738
2.00...	2,447,878	10,204,776	169,032	....	19,271,678	32,093,364
5.00...	62,582,267	32,267,755	72,827,610	....	106,211,195	273,888,827
10.00..	82,835,501	31,650,930	70,747,130	....	119,233,366	304,466,927
20.00..	67,971,032	10,255,480	52,566,400	$4,795,494	71,162,410	206,750,816
50.00..	14,208,375	285,350	10,679,450	2,722,655	14,361,435	42,257,265
100.00.	24,051,200	2,382,100	21,504,100	3,712,000	25,821,370	77,470,770
500.00.	15,690,000	....	112,000	3,448,500	157,500	19,408,000
1000.00	75,115,000	3,955,000	28,000	5,634,500	168,000	84,900,500
5000.00	15,000	....	....	5,475,000	....	5,490,000
10,000.	10,000	....	....	12,340,000	....	12,350,000
Fractional parts...	....	....	30,382	....	....	30,382
Total.	347,681,016	106,348,280	229,014,640	38,128,149	387,925,504	1,109,097,589
Unknown destroyed	1,000,000	....	....	....	....	1,000,000
Net...	346,681,016	106,348,280	229,014,640	38,128,149	387,925,504	1,108,097,589

If, then, the plan of the Commission should be adopted, by which the issue of all other forms of paper money of denominations less than ten dollars is forbidden, and the duty of serving as large change be granted to silver dollars and silver certificates

will do whatever its moral obligations and express declarations require it to do, and very largely in consequence of this confidence in the good faith of the executive authorities, the silver coins have not depreciated in value. It is not doubted that whatever can be lawfully done to maintain equality in the exchangeable value of the two metals will be done whenever it becomes necessary, and although silver dollars and silver certificates have not, up to the present time, been received in exchange for gold, yet, if the time shall ever come when the parity cannot be otherwise maintained, such exchanges will be made. It is the duty of the Secretary of the Treasury, and of all other public officials, to execute in good faith the policy declared by Congress: and whenever he shall be satisfied that the silver dollar cannot be kept equal in purchasing power with the gold dollar, except by receiving it in exchange for the gold dollar, when such exchange is demanded, it will be his duty to adopt that course. But if our present policy is adhered to, and the coinage is kept within reasonable limits, the means heretofore employed for the maintenance of the parity will doubtless be found sufficient in the future, and our silver dollars and silver certificates will continue to circulate at par with gold. . ."

alone, it is evident that practically all of the silver currency can be kept outstanding without exceeding the needs of the community for denominations below ten dollars. This can be shown by the amounts of the various kinds of money of those denominations now used in the country.

Silver dollar pieces (January 1, 1898) - - - - -		$61,491,073
One dollar notes other than silver certificates, -	18,452,188	
Two-dollar notes other than silver certificates, -	12,821,686	
Five-dollar notes other than silver certificates, -	167,677,632	198,951,506
Silver certificates of one, two, and five dollars - - -		157,021,423
Total, - - - - - - - - -		$417,464,002

If this be the sum of money required today by the country in denominations below ten dollars, how nearly will the existing coinage of silver dollars fit this need?

Total silver dollars coined (January 1, 1898) - -		$455,818,122
In circulation outside the Treasury:		
Silver dollar pieces - - - - - -	$61,491,073	
Silver certificates in one, two, and five dollars, - - - - - - -	157,021,423	
		$218,512,496
Remaining to be given a use, - - - - -		$237,305,626
Held by the Treasury:		
Silver dollar pieces, - - - - - - -	$6,401,545	
Silver certificates, - - - - - - -	11,229,912	
		$17,631,457
Net to be kept in circulation, - - - - -		$219,674,169

By withdrawing all notes below ten dollars of United States notes, Treasury notes of 1890, and national bank notes, which amounted January 1, 1898, in all to $198,951,506, a place will be provided for at least this amount of silver currency. It will be seen that the silver to be provided with a place exceeds the paper money to be withdrawn by only $20,722,643; and this sum would, in all probability, be soon absorbed by an increasing demand as the country grows. Taking existing conditions, there-

fore, as a guide, it is quite unlikely that silver to any extent worth consideration would flow back to the Treasury, should silver be given the monopoly of service within the limits set by the Commission.

Carrying out the principles of money governing a coinage having a large seigniorage, the Commission urged that all doubt as to the methods of redemption should be removed, and that there should be direct redemption of silver dollars in gold. This in fact, would be no departure from present practice but would make direct what is now indirect. It would acknowledge in law what is now going on in fact; and this open acknowledgment would remove all possible doubt or uncertainty at home or abroad as to our intentions regarding the parity of our gold and silver coins. The policy of the government as to its coinage should be above the suspicion of uncertainty. If direct redemption of silver dollars in gold be required, our currency system will be unified and reduced to a common basis. Simplicity will take the place of confusion.

51. By the plan of the Commission, unity and uniformity of our metallic money will be obtained, without increasing the strain upon the Treasury. If there be any fear that the promise of direct redemption of silver in gold will impose any new burden upon the Treasury, the figures given will remove it. The need for money of small denominations is so imperative that it must be met; and under the proposed plan this necessity can only be supplied by silver certificates and silver dollars. This would keep most of them constantly in circulation. Then the explicit declaration that this currency can at any time be redeemed in gold, will remove the only reason why anyone would hesitate to take it. If such a currency is made absolutely equal to gold, there will then be no reason whatever why it should be sent in for redemption except either its imperfect distribution or its redundancy. And if it should appear, by experience, that the country did not need so great an amount of money of these denominations, then, of course, it is the bounden duty of the Treasury to take up the surplus. The government received a dollar in gold, or its equivalent for every dollar of the silver it put into circula-

tion; and justice to its citizens requires that if silver is redundant, the Treasury should give back as good as it received In this matter, the Government should consult the wishes and preferences of the people; if the latter, by their voluntary action, send in silver dollars for redemption, thereby announcing that there are more than they need, then this mandate of the public should be obligatory on the Treasury. The plan of the Commission, moreover, gives the Secretary power to sell bonds in case an emergency arises where it may be necessary to obtain gold to properly satisfy the wishes of the people whenever they desire to use less silver. Then only would there be any demand upon the gold in the Treasury, and in such cases the Secretary should be given full power to meet such demands without creating the slightest disturbance in any part of the country's industry.

Probably there would be even less redemption under the direct than under the indirect form. At the present time banks which have silver dollars and certificates in their vaults make it a point to use them in furnishing funds for paying customs duties. Under the present indirect system the banks turn them in for customs duties in advance of any actual redundancy, embracing the opportunity to secure their redemption merely because they are not sure that, if they continue to hold them, there will be another opportunity just when they want to dispose of them.

52. The prime requisite of a circulation like our silver dollars, which bear so large a seigniorage, is that its quantity should not exceed the needs of the business community for the respective denominations. The figures given above, show that our existing silver coinage fully equals — and slightly surpasses — that quantity which we now need. It is therefore plain that, after doing everything which can be done to give silver the largest possible circulation, no further coinage should be thought of. Under a redemption system, in just the proportion that an excess over needs is coined, will the silver return upon the Treasury, and embarrass its attempts to keep a strong gold reserve. For these reasons the Commission urged the suspension of all further

coinage of the silver bullion purchased under the Act of 1890. If this bullion, costing about $100,000,000, were coined into dollars, it would add over $150,000,000 to the existing sum of $455,818,122 to be kept at par with gold. This would be clearly in excess of the needs of the country for notes below $10.

It is to be noted that the plan of the Commission, while providing a place for the silver dollars where they would circulate at par, does not thereby indicate that in the future no additional measures may wisely be adopted to render our monetary system wholly invulnerable. The retention of 455,000,000 of silver dollars in our circulation at double their real value, will require the constant maintenance of a gold reserve sufficient to create confidence in the ability of the government to redeem all the silver that may be sent in. It is possible that in emergencies and in times of political stress, when the credit of the government may be assailed, this may prove an element of weakness. It may be justly observed that, while in normal times no difficulties may arise from this silver circulation of a token character as proposed by the plan of the Commission, in the very time when the country may not be able to give it full protection this token silver may cause disturbance. If we had no form of money that was not of full value — that is, if the face value of every coin were no more than its bullion value — then, in time of emergency the Treasury would be entirely free from the necessity of providing against possible fear on this account and would not be obliged to keep larger gold reserves at just the time when every dollar of gold is needed elsewhere. Consequently, while the Commission postponed to the future the settlement of this particular question, it was believed that adequate provision had been made for preserving the silver dollars at par with gold in normal times. This is made absolutely certain, even in periods of stress, by the authority given to the Secretary to sell bonds for gold. Still, in order to lessen the necessity of such bond sales, if it is found that the burden of redemption is great, and large quantities of silver accumulate in the Division of Issue and Redemption, it is an imperative duty that the accumulated

dollars which the public refuses to purchase should eventually be reduced to bullion and sold at the discretion of the Secretary. After the other reforms provided in the scheme of the Commission have been accomplished, then it may be time to take up this matter and reduce the large amount of our token silver dollars to a sum which will never, even in the hour of stress, give the slightest ground for uneasiness to the Treasury. This, when carried out, it should be carefully noticed, would not imply contraction of the circulation. It would mean that the largest quantity of silver dollars would be out which could be safely used and yet maintained at par with gold. If the withdrawal of silver caused any real vacuum in the circulation, as indicated by business needs, then it would be promptly filled with gold, and token coinage would be replaced by a coinage always equal to its face value. How this vacuum would be filled is shown in the discussion of the Movement of Gold.

53. If it should be thought by objectors to the plan of the Commission that the requirement of redemption in gold of silver dollars, would create a new "endless chain," by which silver dollars could be used to deplete the gold reserve, just as has been done by the greenbacks, attention should be called to the accompanying provision advocated by the Commission, which permits the Secretary to reissue redeemed silver dollars only in exchange for gold coin (or United States notes redeemable in gold). This rule would prevent any possibility of silver dollars reappearing from the Treasury to be again presented for redemption, except after having left gold in their place.

54. The Treasury notes of 1890, it will be observed, are not treated by the Commission as a part of the silver circulation; they are included with the United States notes (greenbacks) in the measures for withdrawal of legal tender government paper money. For these notes, separate reserves and provisions as to redemption are established. This being the case, the silver bullion now behind the Treasury notes of 1890 should be used to strengthen the funds in the Division of Issue and Redemption, for the maintenance of the silver currency at par, and for the retirement of the demand obligations all of which draw on a common

fund. In brief, this asset in silver bullion, which it is forbidden to coin into more dollars, would be dead unless it can be gradually sold and turned into gold. Sufficient reasons have been given why it should not be coined into more silver dollars; hence, there is no other disposition of it possible except to sell it, gradually and with discretion, for what it will bring in gold.

LEGAL TENDER.

55. The essential idea of "legal tender" is that quality given to money by law which obliges the creditor to receive it in full satisfaction of a past debt when expressed in general terms of the money of a country. A debt is a sum of money due by contract, express or implied. When our laws, for instance, declare that United States notes are legal tender—and this is the only complete designation of a legal-tender money—for "all debts public and private," it must be understood that this provision does not cover any operations not arising from contract. Current buying and selling do not make a situation calling for legal tender; a purchaser cannot compel the delivery of goods over a counter by offering legal tender money for them, because, as yet, no debt has been created.[1]

Contracts made in general terms of the money units of the country must necessarily often be interpreted by the courts. The existence of contracts calling for a given sum of dollars and the necessity of adjudicating and enforcing such contracts, require that there should be an accurate legal interpretation of what a dollar is. As everyone knows, the name, or unit of account, is affixed to a given number of grains of a specified fineness of a certain metal. This being the standard, and this having been chosen by the concurring habits of the business world, it is fit that the law should designate that, when only dollars are mentioned in a contract, it should be satisfied only by the payment of that which is the standard money of the community.

[1] "A contract payable in money generally is, undoubtedly, payable in any kind of money made by law legal tender, at the option of the debtor at the time of payment. He contracts simply to pay so much money, and creates a debt pure and simple; and by paying what the law says is money his contract is performed. But, if he agrees to pay in gold coin, it is not an agreement to pay money simply, but to pay or deliver a specific kind of money, and nothing else; and the payment in any other is not a fulfillment of the contract according to its terms or the intention of the parties." 25 *Calif.* 564, Carpenter *vs.* Atherton.

56. Since prices and contracts are expressed in terms of the standard article, it is clear that the legal-tender quality should not be equally affixed to different articles having different values, but called by the same name. This method would be sure to bring confusion, uncertainty, and injustice into trade and industry. No one who had made a contract would know in what he was to be paid. The legal-tender quality, then, should be confined to that which is the sole standard. And it is also obvious that when a standard is satisfactorily determined upon, and when various effective media of exchange, like bank notes, checks, or bills of exchange, have sprung up, the legal-tender quality should not be given to these instruments of convenience. They are themselves expressed in, and are resolvable into, the standard metal; so the power to satisfy debts should be given not to the shadow, but to the substance, not to the devices drawn in terms of the standard, but only to the standard itself, even though, as a matter of fact, nine tenths of the debts and contracts are actually settled by means of these devices. So long as these instruments are convertible into, and thus made fully equal to, the standard in terms of which they are drawn, they will be used by the business community for the settlement of debts without being made a legal tender. And whenever they are worth less than the standard they certainly should not be made a legal tender, because of the injustice which in such a case they would work.

Having shown that the legal-tender quality is only a necessary legal complement of the choice of a standard, it will not be difficult to see that the state properly chooses an article fit to have the legal-tender attribute for exactly the reasons that governed the selection of the same article as a standard. The whole history of money shows that the standard article was the one which had utility to the community using it. As the evolution of the money commodity went on from cattle to silver and gold, so the legal-tender provisions naturally followed this course.

57. A state may select a valueless commodity as a standard, but that will not make it of value to those who would already give nothing for it; and so, it may give the legal-tender quality

to a thing which has become valueless, but that will not of itself insure the maintenance of its former value. This proposition may, at first, appear to be opposed to a widely-spread belief; but its soundness can be fully supported. It should be learned that a commodity, or a standard, holds its value for reasons quite independent of the fact that it is given legal recognition. It has happened that legal recognition has been given to it because it possessed qualities that gave it value to the commercial world, and not that it came to have these qualities and this value because it was made a legal tender.

A good illustration of this truth is to be found in international trade. Money which is not dependent on artificial influences for its value, and which is not redeemable in something else, is good the world over at its actual commercial value, not at its value as fixed by any legal-tender laws. It is not the legal-tender stamp that gives a coin its value in international payments. A sovereign, an eagle, a napoleon, is constantly given and received in international trade not because of the stamp it bears, but because of the number of grains of a given fineness of gold which it contains—the value of which is determined in the markets of the world. And an enormous trade among the great commercial countries goes on easily and effectively without regard to the legal-tender laws of the particular country whose coins are used.

By imposing the attribute of legal tender, however, upon a given metal or money, it may be believed that thereby a new demand is created for that metal, and that its value is thus controlled. And in theory there is some basis for this belief. It is, of course, true that, in so far as giving to money a legal-tender power creates a new demand for it (which without that power would not have existed) an effect upon its value can be produced. But this effect is undoubtedly much less than is usually supposed. It must be remembered that the value of gold, for instance, is affected by world influences; that its value is determined by the demand of the whole world as compared with the whole existing supply in the world. In order to affect the value of gold in any one country, a demand created by a

legal-tender enactment must be sufficient to affect the world-value of gold. Evidently the effect will be only in the proportion that the new demand bears to the whole stock in the world, It is like the addition of a barrel of water to a pond ; theoretically the surface level is raised, but not to any appreciable extent.

58. It may now be permissible to examine into the extent to which a demand is created by legal-tender laws. If the article endowed with a legal-tender power is already used as the standard and as a medium of exchange, it is given no value which it did not have before. The customs and business habits of a country alone determine how much of the standard coin will be carried about and used in hand-to-hand purchases, and how much of the business will be performed by other media of exchange, such as checks or drafts. The decision of a country to adopt gold — when it had only paper before, as was the case in Italy — would create a demand for gold to an extent determined by the monetary habits of that country ; and this demand has an effect, as was said, only in the proportion of this amount to the total supply in the world. This operation arises from choosing gold as the standard of prices and as the medium of exchange. To give this standard a legal-tender power in addition does not increase the demand for it, because the stamp on the coin does not in any way alter the existing habits of the community as to the quantity of money it will use.

But in case an equal power to pay debts is given to fixed quantities of two metals, while each quantity so fixed has a different metallic value but the same denomination in the coinage, Gresham's law is set in operation with the result that the cheaper metal becomes the standard. After this change has been accomplished, the legal tender has no value-giving force. When the cheaper metal has become the standard, its legal tender quality does not raise the value of the coin beyond the value of its content. This cheaper standard, in international trade, would be worth no more in the purchase of goods because it bore the stamp of any one country. Prices must necessarily be adjusted between the relative values of goods and the

standard with which they are compared. If the standard is cheaper, prices will be higher, irrespective of legal-tender acts. Where two metals are concerned, then, the only effect of a legal-tender clause is an injurious one, in that the metal which is overvalued drives out that which is undervalued.

The example of an inconvertible paper, such as our United States notes (greenbacks) in 1862–1879, is still more conclusive. Although a full legal tender for all debts public and private, their value steadily sank until they were at one time worth only 35 cents in gold. In California, moreover, these notes, although legal-tender, were even kept out of circulation by public opinion. In short, the value of inconvertible paper can be but slightly affected by legal-tender powers. Its value is more directly governed, as in the case of token coins, by the probabilities of redemption. As bearing on the point that the value of the paper was more influenced by the chances of redemption than by legal-tender laws, we may cite the sudden fluctuations in the value of our United States notes during the Civil War. With no change in the legal-tender quality and no change in the indebtedness which might be paid with such notes, their value frequently rose or fell many per cent in a single day owing to reports of Federal successes or defeats in battle, which had a tendency to affect one way or the other the public estimate of the probabilities of an early resumption of specie payments. The fact that they were legal-tender evidently had no effect whatever in maintaining their value.

In view of the evident fact that legal-tender acts do not preserve the value of money, it is clear that the demand created by such legislation must be insignificant. And this must be so in principle as well as in fact.

59. There is but one thing which the legal-tender quality enables money to do which it could not equally well do without being a legal tender; that is, to pay past debts. An examination, however, shows that this use of money is very small compared with its other uses. The amount of past debts coming due and which might be paid in any year, month or day is insignificant when compared with the total transactions of that year, month or day

—so very small as to lose all measurable value-giving power. In other words, the one thing which legal-tender money can surely do in spite of the habits, wishes or prejudices of the business community in which it exists, namely, cancel past debts, is infinitesimally small when compared with those other things which man wishes money to do for him. It is for this reason that it ceases to give value, and this is why history has shown so many instances where money endowed with legal-tender power has become utterly valueless. The legal-tender money is no longer money if it will not secure for man the things which are most important for his welfare, if it will not buy food, clothes and shelter; for it performs none of the functions of money except the subsidiary one of canceling past debts.

Moreover, the obligatory uses of legal-tender money are in fact very inconsiderable. A law requiring a past debt to be satisfied with money of a certain kind has for its essence only the payment of something of a definite value, or its equivalent; in practice, it does not even bring about the actual use of a legal money, since the monetary habits of the community will not necessarily require the debt to be paid in such money. Take the extreme case of a judgment by a court against a defendant for fulfillment of a contract; in such an example, of all others, it would be supposed that legal money would be exacted. But even here, the judgment would most probably be satisfied by the attorney's check, or at most by a certified check. If such media of exchange are of common usage in the community they will be resorted to in practice even for legal-tender payments.

The necessity of paying that which would be mutually satisfactory to payer and payee also makes clear why the existence of a legal-tender money does not necessarily cause its actual use in payments. The business habits of the community are stronger than legislative powers. Business men will not as a rule take advantage of a legal-tender act to pay debts in a cheaper money, if they look forward to remaining in business. For, if, by taking advantage of legal devices, they defraud the creditor, they cannot expect credit again from the same source; and since loans are

a necessity of legitimate modern trade such action would ruin their credit and cut them off from business activity in the future. Gold was not driven out of circulation by paper money during the years 1862–1879 in California, because the sentiment of the business public was against the use of our depreciated greenback currency; and a discrimination was made against merchants who resorted to the use of paper.

60. Explanation has been given of the principles according to which legal-tender laws should be applied, if at all. It is not wholly clear that there is any reason for their existence. It may now be well to indicate briefly the origin of legal-tender provisions. It can scarcely be doubted that their use arose from the desire of defaulting monarchs to ease their indebtedness by forcing upon creditors a debased coinage. Having possession of the mints, the right of coinage vesting in the lord, the rulers of previous centuries have covered the pages of history with the records of successive debasements of the money of account. The legal-tender enactment was the instrument by which the full payment of debts was evaded. There would have been no reason for debasing coins, if they could not be forced upon unwilling creditors. It is, therefore, strange indeed that, in imitation of the monarchical morals of a past day, republican countries should have thought it a wise policy to clothe depreciated money with a nominal value for paying debts. Although the people are now sovereign, they should not embrace the vices of mediæval sovereignty for their own dishonest gain in scaling debts.

THE UNITED STATES' SILVER EXPERIMENT.

61. By the coinage revision act of February 12, 1873, the silver dollar of 412½ grains of standard silver was dropped from the list of coins to be executed at the mints.[1] Little attention was then given to this fact for two reasons. The first was that, at the time, neither gold nor silver was in use as money in the United States — where for more than a decade depreciation of the paper currency had driven specie out of circulation. The second reason was even more important. For forty years the silver dollar had been at a premium as compared with gold, and

[1] The coinage act of 1873 provided for the coinage of a "trade dollar" of 420 grains of standard silver. This was never intended for circulation in the United States, but was designed for use in the trade with China and the East. The coin was really intended to be only an ingot of a particular weight and fineness to compete with the Mexican dollar in the Eastern trade. The cost of coinage was borne by the person bringing the bullion to the mints for coinage. It appears, however, that unintentionally the trade dollar was made a legal tender to the amount of five dollars equally with subsidiary coins. By 1876 silver had fallen in value to such an extent that the 420 grains in the trade dollar were worth less than $1.00 in gold. It thus came about that on the Pacific coast, where coin was in circulation, there was a profit in putting these trade dollars into circulation, and considerable amounts of them were so used. This called attention to their status, and the legal tender quality which they had possessed was taken away by the act of July 22, 1876.

In the Eastern states, where the currency was a depreciated paper, it was not until 1877 that the trade dollar became worth less than $1.00 in currency. When this occurred, however, large numbers of trade dollars appeared in circulation throughout the East — whereupon their further coinage was discontinued by order of the Secretary of the Treasury.

Before this, however, $35,959,360 had been coined, and although most of them had been exported, considerable numbers were scattered over the country. Congress by the act of March 3, 1887, which became a law without President Cleveland's signature, provided for the redemption at par of all those presented within six months. Speculators had reimported some of them from China in the expectation that this would be done, and with those gathered up throughout this country, $7,689,036 were presented and redeemed.

These have since been melted and converted into subsidiary silver coin and into standard silver dollars. In the coinage of standard silver dollars, 4,365,631.12 ounces of trade dollar bullion, costing the United States $5,020,361.61, were used — being coined into $5,078,472.

even before the legal-tender paper had displaced both metals, the silver dollar had long been too valuable to circulate as money. In the entire 81 years since the establishment of the mint, only 8,031,238 silver dollars had been coined—and most of these for use by jewelers or for exportation. People had long since ceased to use in the payment of debts silver dollars worth $1.03 to $1.05 in gold, and much more in currency.

A few years later, however, when those who had opposed the resumption of specie payments, and had favored the continuance of the legal-tender paper upon a depreciated basis, found themselves temporarily vanquished, the fall in the price of silver by 1876 appeared to open another way to a cheaper dollar. The forces of paper money inflation joined those of "the friends of silver," and under the guise of reëstablishing a coinage system which had long existed, renewed the fight for cheap money. In 1876 the current had turned strongly in this direction. Numerous bills for the free coinage of silver were introduced into Congress and discussed.

A bill providing for the free coinage of the old silver dollar of 412½ grains of standard silver (371¼ grains of fine silver) was passed by the House of Representatives, December 13, 1876, by a vote of 167 to 53, but was not acted upon by the Senate. A similar measure introduced by Mr. Bland of Missouri was again passed by the House on November 5, 1877, by a vote of 163 to 34. In the Senate the bill was reported from the Committee on Finance by Senator Allison with important amendments, the chief of which was the abandonment of the free coinage provision, and the substitution therefor of a section requiring the Secretary of the Treasury to purchase and coin each month not less than $2,000,000 and not more than $4,000,000 worth of silver bullion. The standard silver dollars coined therefrom were to be full legal tender for all debts public and private, "except where otherwise expressly stipulated in the contract." Certificates of denominations not less than $10 were authorized to be issued against deposits of the coined dollars. The act passed the Senate on February 15, 1878, by a vote of 48 to 21, and though unsatisfactory to the silver men in

the House, was accepted by them as the best they could hope to get at that time. The measure was returned by President Hayes on February 28 with a veto message expressing his objections. On the same day the House passed it over his veto by a vote of 196 to 73, and the Senate by a vote of 46 to 19.

62. Under this act the purchase of silver bullion and the coinage of silver dollars were at once resumed, the amount of silver actually purchased being kept by each Secretary of the Treasury practically at the minimum, $2,000,000, per month. The following table shows the purchases of silver under this act in each fiscal year and the coinage of standard silver dollars therefrom:

AMOUNT, COST, AND AVERAGE PRICE OF SILVER PURCHASED UNDER THE ACT OF FEBRUARY 28, 1878, AND COINAGE OF SILVER DOLLARS THEREFROM.

Fiscal years	Fine ounces	Cost	Average price per fine ounce	Coinage of Silver dollars[1]
1878	10,809,350.58	$13,023,268.96	$1.2048	$ 8,573,500
1879	19,248,086.09	21,593,642.99	1.1218	27,227,500
1880	22,057,862.64	25,235,081.53	1.1440	27,933,750
1881	19,709,227.11	22,327,874.75	1.1328	27,637,955
1882	21,190,200.87	24,054,480.47	1.1351	27,772,075
1883	22,889,241.24	25,577,327.58	1.1174	28,111,119
1884	21,922,951.52	24,378,383.91	1.1120	28,099,930
1885	21,791,171.61	23,747,460.25	1.0897	28,528,552
1886	22,690,652.94	23,448,960.01	1.0334	29,838,905
1887	26,490,008.04	25,988,620.46	.9810	33,266,831
1888	25,386,125.32	24,237,553.20	.9547	32,718,673
1889	26,468,861.03	24,717,853.81	.9338	33,793,860
1890	27,820,900.05	26,899,326.33	.9668	35,923,816
1891	2,797,379.52	3,049,426.46	1.0901	8,740,327
Total	291,272,018.56	$308,279,260.71	$1.0583	$378,166,793

In spite of the steady purchases of silver by the United States, which took from the market every year more than 250

[1] "At the date of the passage of the act of February 28, 1878, there was some three million ounces of silver bullion on hand that had been purchased to provide a Bullion Fund, as required by Section 3545 of the Revised Statutes. There was also a balance of bullion purchased under the act of January 14, 1875 (The Resumption Act), for the subsidiary silver coinage. A part of this bullion was used in the manufacture of silver dollars, which will account for the number coined in excess of what the quantity of silver bought under the act of February 28, 1878, would produce."—Letter of Director of the Mint, February 8, 1898.

times the average annual coinage of silver by the United States mints in the eighty years before 1873, the price of silver continued to fall. The bullion value of the silver dollar, which was about 90 cents when the act was passed, fell to 88 cents in 1881, to 82.3 cents in 1885, and to 72.3 cents in 1889.

63. It was soon found that there was no demand for more than 30,000,000 or 35,000,000 of silver dollar pieces in circulation as coins. But the provision for the issue of certificates made it possible for some time to force this stream of silver into the channels of circulation without serious difficulty, because, owing to the price of bonds, the national bank circulation began about this time to contract.

The banks, however, were not partial to the new currency, and objected to the use of silver or silver certificates in their clearing-house transactions; and though legislation in 1882 made it impossible for the banks thereafter to formally refuse to accept the silver or certificates for clearing-house balances, as a matter of fact in the larger clearing houses silver has not been used. Nor have the banks cared to carry any large proportion of their reserves in silver or silver certificates.

As the first certificates were not issued in denominations below $10, the Treasury soon found it difficult to force into the channels of circulation paper representing the $2,000,000 or $2,500,000 which were being coined each month. Consequently, an embarrassing amount of silver and paper representing it began to accumulate in the Treasury in spite of the most persistent efforts to force it out, involving the payment of express charges on vast sums in the years 1882–1886.[1] In 1885 the Treasury inaugurated the policy of retiring the $1 and $2 United States notes in order to make a vacuum in the circulation to be filled by silver dollars. During the fiscal year 1886, the amount of United States notes of $1 and $2 outstanding was

[1] In this effort to force the silver dollar into circulation considerable expense has been incurred. An appropriation act of August 7, 1882, directed that the Secretary of the Treasury should transport, free of cost, silver coin when requested to do so by an applicant depositing an equal amount of coin or currency. Similar provisions have been contained in subsequent appropriation laws. Under this legislation the cost of transportation, down to the end of the fiscal year 1897, was $1,064,106.

reduced by $14,439,000. In the same period the silver dollars in circulation increased $13,998,000. Meanwhile the accumulation of silver in the Treasury had grown from $39,000,000 in 1884 to $64,000,000 in 1885, and to $93,000,000 in 1886,[1] at which time over half of the large available cash reserve in the Treasury was in silver dollars.

In 1886, the Treasury, for its protection against the threatening danger that it would itself have to accept and care for the entire further coinage of silver dollars, secured the enactment of legislation[2] permitting the issue of silver certificates in denominations of $1, $2, and $5. By the use of these certificates it has since been possible to keep in actual circulation, irrespective of the bank reserves, the larger part of the silver coinage. There were on November 1, 1897, $372,838,919 of silver certificates outside of the Treasury. Of these only $31,593,302 were held (October 5, 1897) by the national banks, leaving $341,245,617, in circulation in other channels. From this temporary settlement in 1886 of the vexatious question of the disposition of the silver coinage, matters moved more smoothly until 1890. As the larger certificates were replaced by others of smaller denominations which were more easily absorbed into circulation, less silver dollars and certificates were forced on the government through payment for customs, and the troublesome accumulation in the Treasury melted away.

64. In 1890, however, the silver advocates saw an opportunity to go further, and the result was the act of July 14, 1890, commonly known as "the Sherman Act." This directed the Secretary of the Treasury to purchase monthly 4,500,000 ounces of silver bullion, to be paid for in Treasury notes redeemable in coin. Until July 1, 1891, 2,000,000 ounces per month were to be coined into standard silver dollars; after that date, only so much "as may be necessary to provide for the redemption of the Treasury notes" was to be coined. Under this act the amount of silver bullion purchased, the cost of the same, and the amount of silver dollars coined therefrom, are shown in the following table:

[1] See Appendix, I.

[2] Act of August 4, 1886; see Appendix, I.

PURCHASES OF SILVER BULLION UNDER THE ACT OF JULY 14, 1890.

Fiscal year, July 1	Amount of silver purchased—Fine ounces	Cost	Av. price per fine ounce
1891	48,393,113.05	$ 50,577,498.44	$1.0451
1892	54,355,748.10	51,106,607.96	.9402
1893	54,008,162.60	45,531,374.53	.8430
1894	11,917,658.78	8,715,521.32	.7312
	168,674,682.53	$155,931,002.25	$0.9244

TREASURY NOTES OF 1890 ISSUED IN PAYMENT FOR SILVER PURCHASED, COINAGE OF SILVER DOLLARS FROM BULLION PURCHASED UNDER ACT OF 1890, AND AMOUNT OF TREASURY NOTES CANCELED AND RETIRED.

Fiscal year, July 1	Treasury notes issued	Silver dollars coined from bullion of Act of 1890	Amount of Treasury notes redeemed in silver and canceled	Amount of Treasury notes outstanding
1891	$50,577,498	$27,292,475	....	$ 50,228,417
1892	51,106,608	3,450,995	....	101,712,071
1893	45,531,375	5,343,715	....	147,190,227
1894	8,715,521	758	$3,346,585	152,584,417
1895	....	3,956,011	6,496,017	146,088,400
1896	....	7,500,822	16,405,120	129,683,280
1897	....	21,203,701	14,816,000	114,867,280
1898*	....	3,824,380	8,519,000	106,348,280
Total	$155,931,002	$72,572,857	$49,582,922	....

65. The notes issued under this act were made by law redeemable in coin at the Treasury or at any sub-treasury by the Secretary—"in gold or silver coin, at his discretion." To this was added the further proviso: "It being the established policy of the United States to maintain the two metals on a parity with each other upon the present legal ratio, or such other ratio as may be provided by law."

This imposed upon the Secretary the legal duty of maintaining all the silver currency of the United States on a parity with gold. Under it each Secretary of the Treasury has pursued the

* First six months only, from July 1, to December 31, 1897.

policy of refusing to discriminate against coins of either metal. When the holder of any coin obligation of the government—whether United States note, Treasury note, or draft on the Treasury—has preferred silver, he has been given it; and where, on the other hand, he has preferred gold, the Treasury Department has not refused to furnish it. It has said distinctly, in substance: "We regard the silver as equal in every way to gold, and hence have no reason for keeping one rather than the other." These Treasury notes have, therefore, come to occupy practically the same position as the United States notes. In consequence, being regarded as gold obligations, they have not been so objectionable as the silver certificates, and large amounts have been used by the banks.

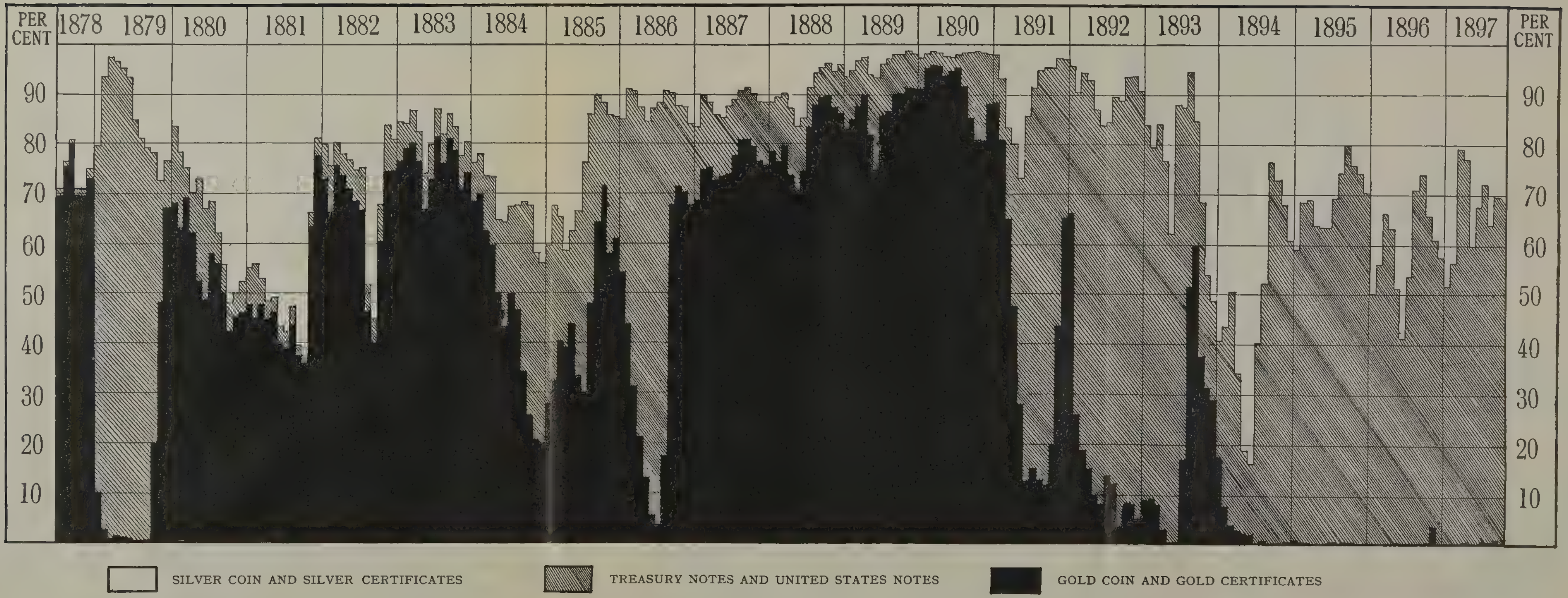
This increase of the silver purchases, however, did not tend to restore confidence in the integrity of our standard. The addition of some $50,000,000 annually to the government credit currency, with no further security behind it than was provided by a mass of rapidly depreciating silver bullion, had cast a doubt upon the ability of the government permanently to maintain gold payments. Gold payments for customs, which had been very general prior to 1890, now rapidly fell off, and, except for one or two brief periods, have never been resumed. In the place of gold, the Treasury found itself obliged to receive silver certificates, United States notes, or the new Treasury notes.

66. By the act of November 1, 1893, the purchasing clause of the act of July 14, 1890, was repealed. Since that date, the coinage of the silver bullion has been going on more or less steadily and some $50,000,000 of the coin notes have been paid in silver dollars and canceled and retired. Prior to January 1, 1898, 56,194,139.46 ounces of fine silver purchased under the act of 1890 (which had cost $54,225,040.90) had been coined into 72,572,857 silver dollars. The difference $18,347,816.10, being the seigniorage, has gone into the Treasury as revenue—being accounted for as a "miscellaneous receipt."

Down to July 1, 1897, the coinage of the silver dollar had resulted in a seigniorage of $69,887,532.29, on account of the silver purchased under the act of 1878, and $17,216,322.87 on

CHART I

KINDS OF MONEY RECEIVED IN MONTHLY PAYMENTS FOR CUSTOMS AT NEW YORK, BY PERCENTAGES



account of that purchased under the act of 1890—a total of $87,103,855.16. That is to say, the silver dollars coined to July 1, 1897, from bullion purchased under these two acts exceed by $87,103,855.16 the cost of the silver from which they have been coined.

67. The depreciation of silver which has taken place since the purchase of this bullion by the government has resulted in greatly lessening the value of the reserve behind the Treasury notes and silver certificates. On the understanding that the United States is bound to make good every dollar which it has thus issued, the balance sheet at the end of December 1897, appears as follows:

Cost of 291,272,018 oz. fine silver purchased under act of 1878 -	$308,279,260	By present market value (at 58 cents per fine ounce) of 459,946,700 oz. of silver purchased - - -	$266,769,086
Cost of 168,674,682 oz. fine silver purchased under the act of 1890	155,931,002	By net loss on transaction to January 1, 1898 - - -	198,505,282
Cost of transportation -	1,064,106		
	$465,274,368		$465,274,368

THE MOVEMENT OF GOLD.[1]

68. One of the most frequent and plausible objections to the retirement of the government legal-tender notes, and their replacement by a national bank currency, arises from the question, how would the banks obtain and hold a metallic reserve? It is admitted that under any system, a substantial cash reserve must be maintained by banks against their deposits. Under the existing system, this reserve, which is merely required to be of "lawful money," may be made up of gold, of silver, or of legal-tender paper of the United States, or of all three combined. In their reports to the Comptroller of the Currency on December 15, 1897, the 3607 national banks of the United States reported aggregate cash reserves of $252,163,553 specie and $158,404,875 legal tenders. Of the specie thus held, $207,093,145 was either gold coin or certificates of ownership of gold coin; the rest was chiefly silver certificates.

These figures show that, although the greater part of the national bank reserves is already in the form of gold, nevertheless about 38 per cent. of that reserve consists of legal tenders. The question has, therefore, very properly been raised, how are the bank reserves to be kept good if the legal tenders are to be gradually extinguished? If the $158,404,875 noted above, or such amount of legal tenders as may at any time exist in the national bank reserves, is to be withdrawn, it must be replaced by other "lawful money," and that lawful money must apparently be gold. Whence then, it is asked, are the banks to procure this gold? Can they be sure of getting it in the first place, and if they get it, can they be sure of retaining it? What would be the situation of the banks in the event of a heavy and continuous gold export movement? Would not their reserve at once disappear because of a withdrawal of gold either through operations

[1] Acknowledgment is due in the preparation of much of this section to Mr. A. D. Noyes, of New York, for a paper on this subject sent in to the Monetary Commission,

of banking depositors or through redemption of notes? These are fair and proper questions, to which satisfactory answers should be given.

69. The first and most obvious answer which will occur is, that if the Treasury were not issuing notes and, therefore, did not have to maintain a gold reserve on its own account, the gold now idly stored in the government vaults, ranging at different periods from $100,000,000 to $288,000,000 and now amounting to about $180,000,000, would presently be available for banking uses. The Treasury's gold holdings are thus larger by fully $25,000,000 than the entire amount of legal tender notes reported as held by the national banks of the United States as part of their cash reserves. If this gold were paid out, therefore, in redemption of the notes held by the banks, the banks would merely have the gold in the place of the notes. By that operation alone, without a dollar of gold from any other source, and without even exhausting the Treasury's stock of gold, the gold reserves of the national banks might be increased from $207,-003,145 to $365,498,020.

But quite apart from the very evident fact that the payment by the government of its notes in gold would leave the banks which now hold those notes in possession of the gold with which they were redeemed, the banks would experience no difficulty in getting such amounts of gold as they desired. The national banks by their own showing already hold in their present reserves $207,093,145 gold. If they have obtained and hold as large an amount as this, it is not unreasonable to assume that they could get more if they wished it, from the same sources and in the same way through which they obtained the amount they already hold. Where, then, did, the banks obtain this gold which now makes up more than half of their reserve?

The gold was obtained partly by importation from abroad, but chiefly from new production of the American mines. The United States Mint reports show that since 1878, $704,000,000 in gold has been produced in this country, an average of nearly $36,000,000 annually. Just now the output is much larger than this average; it was $53,100,000 in 1896, by the Mint estimate,

and $61,500,000 in 1897. From this yearly average of $36,-000,000, $8,000,000 or $9,000,000 annually should be deducted to allow for gold used in manufacture; but making the widest allowance for this industrial consumption, it will be seen that during the past nineteen years, from $500,000,000 to $600,000,-000 of gold produced from the American mines has been available for use as money.

70. It is possible, of course, that a gold-producing country may send to other nations, every year, all or most of its own product. This has been the rule with Australia; it is the rule now with the Transvaal. But in these two instances the gold product was exported only because it was not needed at home. In the United States, owing to our vastly larger domestic trade, the gold when needed was retained. Therefore, in the development of the country since 1878, not only has the new annual output of the American gold mines been kept at home, but gold has been imported from foreign nations. Between 1879 and 1889, by the returns of the Bureau of Statistics, the United States imported $219,000,000 more gold than it exported. With an increasing domestic trade if more money was needed for the circulating medium, it came, as it always may come under such circumstances, in the shape of gold imports. After 1890, on the other hand, foreigners sent home our securities, while under the silver-purchase law of 1890, we more than supplied the needs of circulation with the new legal-tender notes. The result was that gold was exported and that the United States lost in the next eight years most or all of what it had gained from foreign nations since 1879.

But, even with the gold exports for the whole period somewhat in excess of the imports, nearly all of the new American gold product was retained for domestic uses, and this new product, as we have seen, amounted to upwards of $500,000,000. There is another way in which it may be seen that this new gold has been kept available since 1878 for banking uses. On the first of every month, the government publishes an estimate of the amount and kinds of money circulating in the United States. The estimate of the Treasury Department on January

1, 1879, reckoned the stock of gold then in the United States at $231,625,207. On January 1, 1898, the estimate was $699,-478,536. It is possible that these totals are inexact, because when the government began its reports of the amount of money in circulation, it had to make a guess at the total. But while the two sums may be inaccurate, the difference between the estimate for 1879 and that for 1898 will approximately measure the addition to the country's stock of gold within the period; for having once settled on the initial estimate, it was possible to report with greater or less accuracy the monthly and yearly increase or decrease. Taking this difference, it will be seen that since the opening of 1879 the total stock of gold in the United States has increased $467,800,000, which tallies with our previous estimate of new American production, less a comparatively slight net loss on export.

The banks, then, will have in the first place a large and constantly increasing supply of domestic gold on which to draw for their reserves. This new gold has always gone freely into the hands of the banks, and it will continue to do so. The reason why it has hitherto gone into the banks is that gold coin is an expensive currency for private owners either to store or to ship. The miner deposits it in the assay-office and takes an assay-office check in payment. This assay-office check he deposits, in nine cases out of ten, with his own bank, where it becomes a part of the institution's regular deposit fund. The owner of the gold, if he thereafter needs currency, will take from his bank the kind most convenient to him; the bank, on the other hand, presents the assay-office check for gold coin, storing this coin with its own reserves. This simple operation, one of the most familiar in American banking, shows how the new gold product of the United States goes automatically into the reserves of the banks.

71. But, aside from supplies of new gold, the financial institutions of the world have the means of directing the flow of existing stocks of gold to those places where it is needed. To understand this mechanism, it may be necessary to consider briefly the general question of gold exports and imports. An example may assist to a clearer comprehension:

During the year 1897, it appears that there were net gold imports into the United States of about $45,000,000. This gold was sent here, say from England, in payment of balances resulting from a multitude of exchanges. We had sold to England certain commodities and securities, for which England must make payment to us. Her purchases from us gave us a credit there for an equivalent amount—a credit which we were free to realize in commodities, securities, or gold, as we ourselves might choose. The reason why a certain amount of gold was actually shipped was that, at the prices at which the English commercial interests held their commodities and securities, we cared to purchase no more than we did ; and the balance coming to us was paid in money. Had England been willing to sell securities cheaper, that is to say, if she had been willing to pay a higher rate of interest, our investors would have been induced to increase their purchases of securities in England, or, what amounts to the same thing, our financial institutions would have been willing to leave on interest in England balances due to them, instead of asking for remittance. And thus the equilibrium of exports and imports (using the terms, in their broader sense, to include securities, loans, etc., as well as commodities) would not have been disturbed. But at the rate of interest then offered there, and the opportunities for the use of the funds here, we preferred to have the debt paid ; and as the situation in England was such that English interests would rather pay the debt than offer us a rate of interest high enough to induce us to leave the funds with them, the gold was shipped. The real reason for our imports of gold was thus the fact that we would rather have the money here than invest it in loans or securities at the prices at which they were offered, and the English would rather spare the money than offer a rate of interest sufficiently high to overcome our preferences. To balance our exports we were entitled to a certain credit, and if we preferred to have it in gold rather than in steel rails, pocketknives, or woolen goods, we might do so ; and so, after having purchased what commodities we wished, inasmuch as we preferred to have the balance in gold rather than in securities or interest-bearing

balances from English institutions at the rates offered, we got it.

From this illustration it will be clear how gold moves from one country to another as a consequence of general trade movements and especially as a consequence of conditions of the money markets. Further examination of these gold movements will show how it is that they bring into operation forces tending to stop the flow of gold before it reaches a point where it would endanger business. The gold comes, it has been explained, in payment of balances which interest rates in London would not tempt us to leave there in return for securities or other interest-bearing obligations, or, in other words, because we preferred to have the funds for use here. The gold thus shipped, upon reaching New York, goes into the bank reserves. The previously existing relation between the reserves and immediate liabilities of the banks is thereby altered. In order to utilize the new reserves the banks have to extend their discounts, and to do this they lower the rate of interest. In the meantime interest rates in London would have been raised for a reason exactly the opposite of that which had lowered them here. The decrease in the bank reserves there would soon result in a desire to curtail loans and thus tend to produce a higher rate of interest there, accompanied, of course, by a lower price for securities bearing a fixed rate of interest. Before long our investors would find that, with reduced rates here and higher rates in London, they could more profitably employ their capital by loaning it in London than in New York. They would, therefore, increase their loans to London (by purchases of securities there), and thus a substantial equilibrium of imports and exports would have been reëstablished.

As soon, therefore, as we had as much gold as we wished — so much that more could not be employed here as profitably as elsewhere — the cause for the gold import movement would disappear, and the flow of gold to this country would cease automatically; or, if the rate of interest was sufficiently lowered here, and sufficiently raised in England, a movement of gold out of the country might even take place.

72. Thus, even if the American banks did not possess a remarkable advantage in the domestic gold product, they would have the means, with a properly managed banking system, of obtaining it from abroad. Neither England, France nor Germany, produces gold; the banks in each of these three countries furnish currency to meet the needs of trade, yet none of the banks has any trouble in procuring and maintaining a sufficient gold reserve. The Bank of England, for instance, has an unwritten rule that the minimum of its reserve against liabilities shall be in the neighborhood of 40 per cent. This reserve consists of gold or of notes convertible at the Issue Department into gold. The minimum percentage is much higher than has been required in the past for United States national banks, and higher than is proposed for the future. Yet the Bank of England has no difficulty in securing an abundance of gold and its percentage of reserve, during recent years, has averaged nearer 60 than 40 per cent.

If by any turn in the commercial movement, a heavy drain of gold occurs from these countries, the recourse employed by banks, is the recall of loans, with a consequent decrease in the deposits or notes, if not an actual increase of reserve. A process of this kind increases the percentage of reserve to liabilities, even if it does not add to the reserve, because it contracts the total of liabilities. But such a conservative reduction of loans usually does more than this. If there exists a real demand for loans in the money market, the void left by the loans recalled by the Bank of England will be filled by foreign capital; the transfer of such foreign capital to London occasions a fall in the foreign exchanges, and such a fall checks the outflow of gold which we have supposed to exist, and in the end replaces it by gold importations.

No operation in contemporary banking is more familiar than this. It was successfully practiced, for instance, by the Bank of England in the autumn of 1896 and in the winter of 1897. In neither case was any real inconvenience caused to borrowers. The London rate for time-money rose only from 2 per cent. to 3½ or 4; this was enough, however, to stop the outward move-

ment of gold and to check the adverse movement of sterling exchange at every important city. The continental banks pursue under similar circumstances exactly the same plan.

73. The same safeguard will be open to the American banks; indeed, it has always been open to them. The active demand for money familiar to the autumn season has generally caused an advance in Eastern money rates. It has repeatedly happened that, in the busy autumn months, the cash reserves of Eastern banks were called for by the West to sustain its harvest trade. This decrease in reserves usually occurred simultaneously with an expansion of deposits through loans in the equally active city markets. In the end, the proportion of reserve to deposits has often fallen suddenly to the 25 per cent. minimum required by the present national banking law. But the necessary result of such a decrease in reserve was the calling in of loans by eastern banks and an advance in money rates; whereupon foreign capital was transferred to the United States through sales of exchange in New York City; under these sales, the exchange market declined; and, eventually, foreign gold was imported.

This gold invariably went into the bank reserves. During the gold imports between August and December 1896, for instance, the New York banks' gold holdings increased from $47,000,000 to $77,000,000. During the imports in the corresponding months of 1891, they increased from $62,000,000 to $96,000,000. The foreign exchange bankers who imported the gold deposited it with their banks, for exactly the reason which made the miner give up his gold bullion to the assay-office and his assay-office checks to his bank of deposit.

74. Nor is there any reason to suppose that interior banks, away from the centers of foreign exchange, would have trouble in obtaining gold. The facts on this point are quite conclusive. In December of 1897, as shown by the Comptroller's statement, the national banks of Ohio, Indiana, Illinois, Iowa, Kansas, Colorado, and in fact of all the middle and western states, held in their reserves more gold than legal tenders. The truth is, that the bank at the seacoast or at the mining

centers is no more anxious to accumulate gold in excess of its real needs for reserve than is the gold importer or the gold miner. Such a bank is as ready to pass its gold on to other banks which need it and which can pay for it, as the banks have hitherto been, in every gold importing movement, to present their gold to the United States Treasury in exchange for legal-tender notes. A country bank, like any individual, can always get gold, if it has marketable assets to offer for it. In short, gold has always been easily obtainable by our banks. In a properly managed banking system, the question of procuring and maintaining a gold reserve is the least troublesome of all problems which arise. Nothing is more clearly marked out by precedent and practice, and in nothing are results, under proper management, more certain.

75. It has been thought by some that a system of bank currency which should place the issue of currency largely in the hands of the country banks, and should take it away from the government, would throw the responsibility of furnishing gold for export upon the note-issuing banks, just as at the present time it falls upon the greatest note-issuer, the government. This argument proceeds upon the assumption that the method of obtaining gold under the proposed system of bank-issues would continue to be as now the presentation of notes for redemption. Granting this to be the case, it would be necessary for those desirous of obtaining gold to present the notes at some central redemption agency; and the one most naturally suggesting itself would be the New York sub-treasury. Supposing a great mass of notes of different banks to be presented there for payment, the process would be somewhat as follows: the notes would be redeemed and thus the gold would be furnished for export. The amounts thus paid would then be charged against the 5 per cent. redemption account of the banks and they would be called upon to make the fund good. This would most cheaply and naturally be done by draft from the country banks on their New York correspondents. To meet such drafts the banks would usually keep money on deposit with their correspondents in New York and thus the strain would be trans-

ferred to the New York, *i. e.*, to the stronger, banks of the system.

As a matter of fact, however, those in need of gold would not be likely to seek to obtain it by presentation of notes for redemption. True, gold is now most naturally and easily obtained by the presentation of the government demand obligations for payment in gold. This is due to the fact that at the present time the legal-tender notes by their very existence relieve the banks from the necessity of paying gold. The Treasury being the only certain source of gold supply, is resorted to when gold is really needed. Checks on deposits may be paid in legal-tender notes, and, if gold is wanted, these notes are accepted chiefly for the purpose of presenting them at the Treasury. Were the legal-tender notes retired, however, banks would have no other course than to meet demands upon them in gold. The banks of England and France, which are constantly under the necessity of furnishing gold for export, do so in response to a check or draft when the metal is wanted. This would be the case with the New York banks were the legal tenders finally retired. And, like the European banks, they would be able, as already seen, to save their resources from becoming unduly depleted, by raising the rate of interest as occasion seemed to demand.

76. Practically everything which has been said as to the movement of gold from one country to another applies equally well to the movement of money from one portion of the same country to another. Indeed, in order to observe the principles of international trade operating in their purest form, it is necessary to look for some place where restrictions of a commercial character are absent. This may be found in the case of two portions of the same country. A good example is that of Arkansas and New York, which are dissimilar in climate, manufactures, and natural products and whose trade must be regulated upon principles exactly like those of international trade.

Take, for example, the problem of the distribution of currency. For a long time it has been observed that currency tends to flow from the Southern and Western districts of the

United States into the eastern commercial centers. It has been shown that the reason for the movement of gold between any two countries, is the necessity of paying for any balance which may exist between the amounts of imports and exports—including in each securities. The same statement would hold true concerning any sort of currency used in all parts of the same country. There would be the same reason for the transfer of quantities of this currency from one remote portion of the country to another portion, in case the purchases of the first of these communities from the second had exceeded its sales to the second, and if the first community was not willing to pay a rate of interest sufficient to induce the second to loan the balance. It has been seen, too, that the movement of gold, or in the case under discussion, of currency of any sort, arises from, and in fact is merely, the transfer of capital from the one to the other and is largely dependent upon the rate of interest.

If the citizens of Arkansas have sold to buyers in the East farm products to the amount of $500,000 they have a credit of that amount in the East. This credit they can employ as they choose. If they wish pianos, silks, etc., they can have them; if they wish plows, harvesters, and other farm implements, they can have them; if they wish more money for the transaction of their business, they can secure it; or if they wish to buy government or railroad bonds or invest on interest in the East or elsewhere a portion of the sums coming to them in payment for their crops, they are able to do that. If they choose to have the money rather than the other things, there will be a movement of currency from New York to Arkansas; and if later they find they have more currency than they really need for the convenient transaction of their business, it will surely return East simply because they prefer either to have something else in place of it or to save interest by paying off a portion of their indebtedness to the East. In the case of many of the Southern and Western communities of the United States, this is precisely the process which has been going on. For a long time purchases from other communities have exceeded sales to them. That is to say, actual capital, such as machinery, etc., has been purchased from

the East, and to the East have been sold not only various products but mortgages as well, and rather than sell the mortgages at the prices offered, they preferred to send money, and all currency except what was really needed has thus been drained off. The scarcity of currency existing in these districts is thus by no means due to a general scarcity of currency in the country as a whole; but has been solely due to the fact that these regions have been deficient in capital and have preferred to invest the returns from their products otherwise than in a medium of exchange.

77. The movements of gold from one country to another, or of currency from one part of our country to another, have been shown to follow natural laws. This movement is one of convenience, and follows the trade operations of the respective countries or regions, chiefly through the fluctuations in the rates of interest. Nor does this tidal ebb and flow touch the fundamental elements regulating the prices of products. The movement of currency to and from New York and Nebraska does not determine the price of wheat in either New York or Nebraska; that is determined by other forces. This movement of the currency is not the cause of the trade movement, but the consequence. And so it is in international movements. The price of wheat in London and New York is not determined by the flow of gold back and forth; on the contrary, the movement of gold is a consequence of the trade — not only in wheat, but in other goods and securities. That prices in general have little to do with the gold movement may be easily explained.

Price is simply a ratio between commodities and the standard, which is, in general, gold. There are an immense number of circumstances which tend to affect general prices. But the outcome of all these influences is a certain definite adjustment of the ratios in which commodities will exchange for gold. And inasmuch as modern methods of transportation and communication have practically brought all countries into one general market, gold prices must be uniform the world over. The only differences will be those due to cost of transportation. A change in the price of any commodity, therefore, must imply a change

in the price of that commodity all over the world. Its price is the ratio between it and gold, which has a value issuing from a comparison with commodities throughout the whole world. In any system of gold-using countries, therefore, the level of prices must be the same throughout all. It would be impossible under modern conditions that it should become higher in one and remain lower in another. It appears that prices being thus determined by the ratio between gold and commodities all over the world, a mere abundance of gold in any one country could not change this ratio in that country as distinguished from the rest of the world. For, since the value of a unit of gold in terms of commodities has been established and is well known in all the markets of the world, it would be impossible that persons in any country should be willing to give a greater quantity of gold for a definite amount of a certain kind of commodity, merely because gold was abundant in that country at that particular time. That is to say, no more gold would be given in a particular country where there was an abundance of gold than in one where gold was less abundant, any more than wheat would sell for less in Chicago than in Liverpool (cost of transportation excepted) simply because there happened to be a larger supply of wheat on hand in Chicago than in Liverpool.

PART II

BANKING

NATURE OF A BANK.

78. In its simplest function a bank has a coöperative quality. It does for many persons cheaply what, without it, each would be obliged to do at considerable expense for himself. A trustworthy bank, with vaults giving protection against fire and robbery, serves for each one of many persons; while to gain like security a single individual could ill afford so expensive a vault. In short, by the division of labor, a separate profession has been evolved in society which performs certain services whereby all who need them are convenienced and saved expense. If this were all, however, a bank would be no more than a safe place of deposit; but it is much more than this.

A natural consequence of the deposit of money with a bank for convenience and safe keeping was the creation of methods by which the ownership of these deposits could be transferred without actually moving the money itself. In early banks, devices for this purpose were already used. In modern times the transfer is promptly and easily made by a check, or draft, which is merely an order upon the bank by the depositor to credit a certain sum to the person named. In this way a deposit becomes as available for payments as if actual money were passed from hand to hand.

79. A savings bank, or a loan company, is not a commercial bank in the proper sense. Depositors furnish the total funds (or capital) loaned by a savings bank on time-securities; and it is understood that they need not expect to have deposits paid back on demand. Most savings banks, because their resources are invested in time-loans, properly reserve the right to exact a notice of perhaps sixty days in case of intended withdrawal of deposits. A loan company, whose funds are paid in by shareholders, is not very different in kind from a savings bank. The funds are subscribed to be loaned out on mortgages or time-securities. Since savings banks are provided for those who are

less able to invest on their own account, legal precautions hedge in the kind of investments they can make; while a loan company takes its own risks without much limitation, its shareholders aking their chances. In neither case do these institutions eceive deposits which take the form of demand liabilities.

80. A commercial bank, however, not only receives deposits, but it is particularly distinguished by the fact that it engages to repay a deposit on demand. The banker finds that it is not necessary for him to retain all of the money in his vaults to enable him to do this; because not all the depositors will want to draw out their funds at the same time. Some will ask for payment today, but others will be making deposits. As a result, he ascertains by experience that if he keeps on hand in cash a proportion only—say one-fourth or one-third—of the resources which have been entrusted to him, he will still be able to meet on presentation all demands of depositors or noteholders. He is, therefore, enabled to loan the balance of these funds just as he can loan his own capital. Thus another function of a bank is developed,—that of loaning, or discounting.

81. Many persons and firms have balances which they are not ready to invest permanently, and these are freely deposited in banks. Small sums, each of little effect by itself, are accumulated in great numbers, and make very large amounts in the aggregate. So that, bits of capital that would be ineffective for serious productive operations on a great scale, are thus placed where they may be put to important uses. In this way, the savings of the small, or uninformed capitalists are made efficient for the productive use of active members of the community to whom they may be loaned. Although banks do not actually increase the wealth of society, they lead to the productive use of amounts which, without banks, would remain inactive. They place funds where society gets the most from them, by allowing them to pass into the hands of the most efficient members of the community.

This process of uniting scattered sums into large capitals which can be effectively employed, is, of course, not only the function of commercial banks, but equally that of savings banks

or building and loan associations. The distinguishing function of commercial banks, however, is the creation by them of a demand liability through which the sums left with them may serve as a currency, since by the use of notes or of deposits and checks, they are available purchasing power in the hands of their owners. The investor in a building and loan association or savings bank, on the other hand, loses the opportunity to use his money in other ways because no demand obligation is credited to him. That is to say, the deposit in a commercial bank performs a currency function, while the deposit in a building and loan association or savings bank is no longer currency, but an investment, since in the former case the depositor receives a claim payable on demand and in the latter case he does not. This is the primary distinction between a bank and other financial institutions.

82. Banks cannot make something out of nothing. They cannot coin wealth or money out of any intangible thing. The operations of legitimate banking are always based on property; whenever these operations are not so based, they cease to be legitimate, and become speculative. The profit of banking arises from the discount operation or lending. Of course, supposing the rate of interest to be fixed, the more a bank can lend, the more its profits will be. What, then, can it lend? It has its capital; it can lend that. It has also the resources entrusted to it by the public through the discount operation; it can loan such part of these resources as it does not need to hold in cash to meet the demands of depositors and noteholders. This, then, is the limit placed upon its power to loan—its own capital and the resources of others entrusted to it (except so much thereof as must be held as a reserve). It does not "coin its credit." If a bank has won the confidence of the public by the safe and conservative management of its loans and investments, it will receive large deposits. The larger its deposits, the larger the sums it can loan; and hence the larger its profits.

The bank becomes responsible, whenever it loans its depositors' funds, that the titles to these funds may be realizable upon in cash; and quickly in case of suddenly increased demands in

time of emergency. It assumes this responsibility to the full extent of its capital, which must meet any losses due to bad judgment. Upon the banker, then, rests the responsibility of deciding that the security for a loan is realizable in a kind of property that is always salable. Hence every business transaction involving a loan from a bank must pass the judgment of the banker who is acting with full knowledge that an error will be followed by financial loss. This is the reason why it is possible to say that the resources of a bank, received as the security for loans reflect quite accurately the character and soundness of the business transactions of the country.

83. The profit of banking arises from the discount operation. The bank buys and sells something, and makes a gain thereby in the same way as other commercial institutions. In making a loan, the bank buys the right (well secured) to receive a given sum of money at some future date; for this it gives an equal sum less the interest. The borrower gets this amount in cash or more often in the form of a liability of the bank to pay on demand. The profit consists in the fact that the demand-liability given the borrower is always less (by the profit) than the amounts to be received in the future. The borrower needs immediate means of payment; and the bank can give this to him in either of several forms, whichever the customer prefers. It can give him actual money from its uninvested resources (either a portion of its own capital or money left with it by others); or it can give him its circulating notes; or it can give him a credit on its books —a deposit account. The two forms of payment last mentioned are those which are most used, and most characteristic of banking operations. Then, whether the customer chooses to use checks and transfer his deposit to another person without taking the funds from the bank; or, whether he finds his needs best served by taking notes of the bank away in his pocket— is settled merely by the wishes of the borrower, and not by the will of the bank. The amount of the loan being fixed it then makes no difference whatever to the bank, so far as its profit is concerned, whether this credit to the borrower takes the form of a deposit, or of a withdrawal of its notes. Both are equivalent demand-

liabilities of the bank. A note is a promise to pay on demand; so is a deposit. Either one means that its holder refrains from demanding actual money from the bank, the deposit or note answering all his purposes. Large city banks have customers who scarcely ever use anything but deposits and checks, who never call for notes; and yet, without issuing notes, these banks make a profit quite as well as any note-issuing bank. It must be evident, at once, that the privilege of issuing notes is not in itself the means of profit; but that the profit arises out of the process of discounting, or lending.

84. On the other hand, in some parts of the country checks are little used. To make payment one needs a form of money that will be taken irrespective of any knowledge of the signature on the check, or of whether or not the signer has a deposit in the bank. And if the transactions are for small sums, for retail trade, or payment of wages, checks are not always convenient, especially if, as in rural districts, a bank is not close by. Under these conditions, a borrower at a bank will usually ask for that means of payment which his situation and the business habits of his community demand. If he cannot get it in that form, his loan is ineffective. Hence the habits of the community determine which form of liability the bank will make use of; it is not determined by the will of the bank. If the latter is not able to conform to the business habits of its customers it cannot loan in that district. In the interest of borrowers, therefore, a proper banking system should be so ordered that it can adjust itself to the needs of its constituency. If banks are given perfect freedom in conducting their business, whether they issue notes or not is a question merely of convenience to their customers; to a large city bank the privilege of issuing notes is of almost no advantage.

85. The government does no more in the matter of supervising the issues of a bank than it does in coining bullion into money. In the latter case, it certifies to the fineness and weight of the metal in a given coin; it does this not for the bullion owner, but to save the public the inconvenience and delay of weighing and testing the metal at each exchange of goods and

money. In the same way it provides a banking system, decides how the notes should be secured, redeemed, and the like, not in the interest of the banks, not even to protect note-holders against loss; but to save the public the inconvenience and delay involved in examining into the security of each note; for it is only when bank notes are issued under such a system that it is unnecessary to examine into the circumstances of each individual bank that they can attain their greatest usefulness. If, also, there is free banking, so that any body of reputable men can form a bank under the general law, banking is not a monopoly; and the bank which is unwilling to issue its notes under a system that is safe and wise for all, thereby indicates that, if permitted, it might issue its notes under methods little likely to bear inspection and with the evident result of loss or inconvenience to the public.

86. How truly the properly regulated issue of bank notes is really in the interest and for the convenience of the public may be seen by taking a simple illustration of those needs of a community which lead to the organization of a bank.

Suppose the case of a farmer who desires to market his crop. His prospective purchaser has not the immediate funds in hand with which to purchase the farmer's products. He offers to give his note for some amount (say $1,000). The farmer, however, wishes to use the proceeds of the sale of his crop in paying the expenses which he has incurred in raising it. The credit of his purchaser is undoubted, so that the farmer's creditors would unquestionably accept the note of the purchaser in payment. In order that the claims may all be satisfied, the farmer proposes to accept instead of one note for $1,000, one hundred notes for $10 each, and for the privilege of having them payable on demand, he proposes to forego the interest upon them. In such a case the purchaser of the produce might take the goods upon these terms, and if his total property, upon which the notes would become a lien, was formerly $10,000, he would then have $11,000 as security for the notes — that is to say, his original $10,000 and the $1,000 in property additional.

The illustration may be carried further: Suppose the mer-

chant who purchased the farmer's crop were to extend his operations and to purchase the products offered for sale by nine others, giving on each occasion one hundred notes of $10 each. The merchant has now outstanding one thousand promissory notes of his own of $10 each, making $10,000 in all. These notes are all payable on demand and have been given by the farmers who received them to their creditors in payment of debts. The notes being payable at the wish of the holder, are likely to be presented at any time. To enable him to meet the notes as they are presented, the merchant has the original $10,000 of property with which he started, and in addition ten different lots of produce worth $1,000 each or $10,000 in all. We may assume that on a certain day, a month after the notes were given, fifty of the holders of the notes, finding it desirable to obtain money, for the purpose perhaps of paying taxes, present the notes for payment. The merchant foreseeing the probability of this event has, in the meantime, converted either a part of his capital, or of the goods purchased, into coin (as a reserve to meet demands). He is thus prepared to meet the fifty notes, and when presented he pays for them $500 in cash and destroys them. In such a way as this, a community otherwise devoid of a medium of exchange, might derive great help from the creation of such a currency, which converts property into means of payment. The farmers have been able to market their crops and obtain the means with which to satisfy their creditors without sacrifice. Had they not been able to obtain from the merchant the titles to immediate means of payment, it might have been necessary to sell their products at a heavy loss.

87. So far it has been assumed that the deposits of a bank come into existence when other persons leave their funds with the bank; and that the banks can lend the portion over and above the sums needed for reserves. But this is by no means the origin of the principal sums which swell the deposits to very considerable, or even surprising, figures. It seems, at first, paradoxical to say that in the main deposits do not result from the bringing of money to a bank. And yet it is literally true. This is indeed one of the things most necessary to understand about

a bank, because it is thus only that we can comprehend how a bank creates a most effective currency without issuing any notes. No progress can be made in getting correct views of banking and currency until we grasp the fact that banks are not confined to issuing notes when they wish to create a medium for the exchange of goods. Indeed, in no other way, can one clearly see how large city banks, without issuing a single note, can supply their customers with a perfectly satisfactory medium of exchange. Such a currency is readily supplied through the deposits of a bank, on which checks are drawn.

A manufacturer may have a stock of hardware, and yet he needs a means of payment at the present moment. If he has sold goods on ninety days' time, and needs means to pay a note maturing tomorrow for materials used in his factory, he can present his evidence of sale of this property to a bank and get it changed into means of payment. The value of goods expressed in terms of money (the common denominator) is by the bank converted into means of meeting obligations, so that goods may be exchanged against goods. This is the preëminent service which the banks render to society. The process is simple. The sale of the goods creates a bill drawn on the purchaser for, say, ninety days; the manufacturer takes this claim for a given sum due in the future, and sells it to the bank in return for the right to draw on the bank immediately. That is, the loans of the bank (on the side of resources) are increased by this bill; and a deposit on the liabilities side is credited to the borrower. Now it by no means follows that the borrower (who is now technically a depositor to the amount of his loan) will take his deposit away. All he wishes is that the value of the goods sold may be utilized in the form by which he can pay tomorrow's maturing note. By drawing a check on the bank in favor of his creditor he transfers to another the right to draw on demand, and his debt is paid. The granting of the loan by the bank depends upon the borrower's possession of or capacity to obtain property; whether, after the loan is granted in the form of a deposit, actual money will be drawn out, or whether this right to draw will be passed about on paper from one to another depends entirely upon the

business habits of the bank's customers. In our chief cities the right of drawing out cash is seldom exercised, because payments can be more expeditiously and safely performed by transferring the title to the deposit.

The real function of a bank is thus to assist the man of business who has property, and whose credit is good where known, to secure an advance of current funds which he can use in his business. Those selling commodities to him may not be willing to let him owe them, for they may not know what his credit is, or even if they do, may insist on being paid because they need the money, and those to whom they must make payments would not know the merchant's credit, and hence would not be willing to take his notes. They know the bank, however, and are willing to have it owe them (either as evidenced by bank notes or deposits), because they know that the customs of the community make such bank liabilities a form of money. The members of the community, therefore, are willing to leave funds with a bank which they can call for; and on the strength of these, and with the aid of the bank's capital as a guarantee, the bank makes the advance to the merchant who needs means of payment. The bank's promises are convenient and useful to the community, since they are currency, while an individual's promises are not usually sufficiently well known or guarded; and third, the one is more acceptable and valuable than the other. For this reason the merchant is willing to pay the bank for giving him immediate means of payment for his note, even though what he receives may be only the bank's promise instead of his own. So long as the bank's promises are convertible into money and are accepted by the public as equally as good as money and even more convenient, they are currency and means of payment, which his own promises are not.

88. In this way, then, a man having property, readily salable, can borrow upon the strength of it, get the value of that property converted into means of payment, expressed in terms of the standard, and exchange it for other forms of property which he most needs at the moment in his business; and all this is swiftly and conveniently done by creating a deposit and giving

the right to draw on it. It is a highly efficient medium of exchange — indeed the most efficient, and the most largely used at this time by the business men of the United States. The value of wheat shipped from Chicago to New York appears—expressed in terms of money — in a bill at a New York bank to be traded against a similar title to dry-goods traveling west from New York. And the exchanges take place through deposits and transfer of rights to draw on deposits. Anyone may now see how the deposits of a commercial bank are enormously increased by the result of granting loans. It does not at all follow that deposits were originally formed out of money left with the bank. In most cases the balances deposited are simply checks transferring claims on deposits created by loans. In England and the United States, in normal times, the loans and deposits move together, and their sums roughly correspond; because in these countries the habit of using checks on deposits is highly developed, as contrasted with the continent of Europe (or rural districts in our own country), where note-currency is largely used.

89. When we consider the operations of a bank, then, it is evident that the institution can do its work equally well either by notes or deposits. It is for the community, by its own business habits, to determine which shall be used; from the view of profit to the bank it makes no difference which is used. It also follows clearly enough that expansion and speculation are equally possible under either form of currency created by the bank. The essential point lies in the discounts. If a speculative mania seizes the public and loans are made on property which turns out eventually not to be worth what it seems to be, then the liabilities created on the basis of these assets may be unduly expanded whether the liabilities are notes or deposits. This has been illustrated by history. In the United States before 1837–1839 careless lending produced an expansion of notes because notes were the kind of currency the public then demanded. In England, before 1844, it was also urged that speculation and expansion were due to the issue of notes. In 1844, the Issue Department of the Bank of England was entirely separated from the Banking Department; and while its notes

can no longer be increased except by deposit of gold, the deposit-currency provided by the Banking Department has been expanded in times of over-trading quite as certainly as under the old form of note-issues. Without going into details, it is sufficient to point out the error of supposing that by controlling the issue of notes alone expansion of the currency can be prevented. So far, however, as notes are the necessary currency of certain parts of the country, they will, of course, be the form through which any expansion must necessarily take place.

DEPOSIT CURRENCY.

90. The process by which a highly efficient medium of exchange is created by means of bank deposits has already been described. But its influence on the problems under discussion is not so generally admitted as it should be. If properly understood, those persons who profess to regard with favor a medium of exchange which expands easily in time of need should heartily favor a sound banking system out of which an efficient and expanding currency arises. The characteristics of this currency were clearly understood by Hamilton in 1790:

"Every loan which a bank makes is, in its first shape, a credit given to the borrower in its books, the amount of which it stands ready to pay, either in its own notes, or in gold or silver, at his option. But, in a great number of cases, no actual payment is made in either. The borrower frequently, by a check or order, transfers his credit to some other person, to whom he has a payment to make; who, in his turn, is as often content with a similar credit, because he is satisfied that he can, whenever he pleases, either convert it into cash or pass it to some other hand, as an equivalent for it. And in this manner the credit keeps circulating, performing in every stage the office of money, till it is extinguished by a discount with some person who has a payment to make to the bank to an equal or greater amount."

The same understanding also appeared in the statement of the Bank Commissioners of Massachussetts:[1]

"By far the most operative of the causes which have diminished the circulation of bank bills has been the increased use of deposits, bills of exchange, and drafts. To keep a bank account was once the badge of a large mercantile business; it is now the habit of most shopkeepers, mechanics doing a considerable

[1] Report of Massachusetts Bank Commissioners (J. F. Marsh, Wm. D. Forbes, and George Walker), October 15, 1860, *Executive Document No.* 77, pp. 47–8, XXXVI Congress, Second Session.

business, and professional men. Bank deposits are, properly speaking, a part of the currency; and for that reason our law wisely places them on a footing with bank bills in providing a specie basis for their redemption. This is a truth not always recognized, and sometimes even denied; but a moment's reflection upon the characteristics and functions of both deposits and bank bills will show that while they differ in the manner in which their value is evidenced, and their transfer accomplished, they do not differ in intrinsic character. Considered as a whole, deposits grow out of the discounting of paper, precisely as does the issue of bills; like them, they are capable of performing every operation of payment, and may effect a countless number of payments without any redemption being made of them by the bank; the only difference being that the transfer of bills is by manual delivery, while that of deposits requires a registration by the bank to perfect it. . . . . By the use of deposits the bank derives a profit, precisely as by the issue and circulation of bills; like bills, they are payable by the bank on demand in specie, and any unusual withdrawal of them affects the bank precisely as an unusual demand for the redemption of its bills would do. The suspension of specie payments by the banks of the city of New York in October 1857, which led to a similar suspension throughout this State, was not caused by the presentation of bills for redemption, but by the withdrawal of deposits."

91. And yet during the early part of our history there was little consideration given to the deposit currency, largely because the country as a whole was, speaking generally, then in the state of our present rural districts where note-issues and not deposit currency are chiefly required. As a consequence, legislation directed against bank expansion was concentrated solely upon note-issues. This has been fully explained by Professor Dunbar,[1] as follows:

"Besides the apparent ease of legislating upon note-issues and the obvious difficulty of legislation upon deposits, the notes were, in the earlier decades of our history, the more important

[1] "Deposits as Currency," *Quarterly Journal of Economics*, vol. i, July 1887. The subsequent extracts are also taken from the same admirable paper.

of the two. The comparative sparseness of population and the imperfect development of the banking habit, in a new and more slowly advancing country and in a less advanced age than the present, created an early preference for the currency which passes from hand to hand, and discouraged the use of that which implies a resort to the bank. Even in the abnormal years 1809 and 1811, when all business was stagnant as the result of the embargo and subsequent non-intercourse, the note-circulation of the Bank of the United States was little below its debt to individual depositors, as shown by the only statements of that institution ever given to Congress; and, in the accounts even of the best developed state banks of that date, the notes have clearly the first place. The figures collected by Gallatin for 1820 and 1829 show the same preponderance of note circulation. The returns collected by the Treasury for many years, under the resolution of July 1832, show that it was not until 1855 that the deposits of the banks, taken in the aggregate, rose above their circulation. Even under such special circumstances as those of Massachussetts, the notes continued to be the more important element until 1858, with the exception of an irregular period from 1806 to 1823, and two or three scattered years of exceptional conditions."

"And not only were the notes practically the more important during these years, but events riveted the attention of the public upon them. The suspension of specie payments at the close of the second war with Great Britain, the history of the second bank of the United States and the struggle for its re-charter, and the hard-money movement which finally led to the independent treasury system, all tended to keep the notes in the foreground, and to give the impression that banking was synonymous with note issue, as the old acts of Parliament treated it. The long-continued suspension of 1861 and the later controversies, turning primarily on the questions raised by the greenbacks, but involving the bank notes, have easily and naturally followed the same line."

92. The rapid growth of the deposit currency, which was out of all proportion to the growth of banking capital, and to the

quantity of national bank notes issued, is to be seen in the reports of the Comptroller of the Currency. These reports show how admirably this species of currency seems to have served the interests of the community, since this expansion, at the expense of notes, could have taken place only by the voluntary choice of the business public, arising out of its own conception as to what was most convenient. The figures[1] are given since 1875.

	Notes	Deposits				
	National banks	National banks	State banks	Trust companies	Private bankers	Aggregate
Average for six months ending November 30, 1875........	318	675	....	487	....	1,162
May 31, 1876..............	308	617	....	480	....	1,097
May 31, 1877..............	293	640	....	471	....	1,111
May 31, 1878..............	301	611	230		184	1,025
May 31, 1879..............	304	614	257		140	1,011
May 31, 1880..............	321	799	319		183	1,301
May 31, 1881..............	309	989	386		242	1,617
May 31, 1882..............	321	1,047	452		296	1,795
Nov. 30, 1882..............	312	1,095	490		289	1,874
For year 1883..............	312	1,043	335	165	[300]*	[1,843]
For year 1884..............	295	979	325	189	[300]*	[1,793]
For year 1885..............	269	1,106	344	188	[300]*	[1,938]
For year 1886..............	245	1,146	343	214	[300]*	[2,003]
For year 1887..............	167	1,285	447	240	[300]*	[2,272]
For year 1888..............	155	1,292	410	258	[300]*	[2,260]
For year 1889..............	129	1,442	507	300	[300]*	[2,549]
For year 1890..............	126	1,522	553	336	[300]*	[2,711]
For year 1891..............	124	1,535	557	355	[300]*	[2,747]
For year 1892..............	141	1,753	649	412	[300]*	[3,114]
For year 1893..............	155	1,557	707	486	[300]*	[3,050]
For year 1894..............	172	1,678	658	471	[300]*	[3,107]
For year 1895..............	179	1,736	712	547	[300]*	[3,295]
For year 1896..............	199	1,668	696	586	[300]*	[3,250]
For year 1897..............	197	1,770	723	567	[300]*	[3,360]

93. This highly efficient currency is certainly present in very large amounts — much larger than any other medium of exchange. But the one quality which characterizes it in a preëminent degree is its elasticity. And on this point we cannot do better than quote again the words of Professor Dunbar:

[1] The table supplied by Professor Dunbar to 1886, has been continued to the present time.

Comptroller's Report, 1897, pp. 571, 572, and *Finance Report*, 1893, p. 532.

* Estimated.

"It adapts itself to the demand of the moment without visible effort, and either by expansion or contraction, as the case may be; and it does this quite irrespective of legislative purpose or guidance. From the figures, indeed, the conclusion is irresistible that, if for any reason the creation of deposit currency through the agency of the national banks is hindered or limited, it will make its growth by means of state banks; and, if not by these, then by a system of private banking, which no legislation can touch, until the government shall assume the power of declaring whether A may owe B or not. The growth of this kind of credit may be guided and it may be made more or less sound according to the wisdom of legislation. The stability of the standard to which its value relates is wholly within legislative control, and the continuity of the test of its solvency by reference to that standard is within the scope of legislative influence. But, whether the legislation be good or bad, here is the adjustable part of our system of credit currency, and the part of it which will continue to adjust itself to the scale of the transactions to which current business naturally gives rise."

94. "And, in view of the extraordinary growth of this kind of credit currency, the mere question of the amount of national bank notes in circulation sinks into insignificance, and with it the question whether their place must be made good by other descriptions of paper, as, for example, by greenbacks. There is a real question as to the convenience of using coin, in place of a part of the paper which the community uses in its small transactions; there is a question as to the wisdom of depriving a great system of banks of the ability to supply whichever form of credit may be required by the public; and there is a grave question as to having any larger part of our credit currency, or any part of it, subject to control as regards its amount, by any legislative body whatever. But as regards the mere question of contraction, still sometimes brought forward with respect to the paper currency, the grounds for it have ceased to exist. For, besides the fact that since resumption specie has come in and must continue to come, through an ever open door, to make good any deficiency of circulating medium, the growth of

deposits has covered many times over all loss in the amount of paper circulation. Indeed, we may go farther, and say that if the United States government were to pay off every legal tender note, and if every bank note were to be withdrawn, these changes would produce no real contraction of the currency. With specie thus brought into common use for smaller and everyday transactions, we should, it is true, have a currency far less convenient for its minor uses, and we should no doubt see the use of the deposit and check system thus carried prematurely into classes of transactions and into sections of country where the note now meets a popular demand; but, as regards the mass of exchanges from which the business condition of the country at any given time takes its tone, we should find them carried on as now, by a creation of bank credits on whatever scale the needs of the time might require. In fact, so soon as specie payments were firmly established and the value of credit currency was settled, by its assured conversion at pleasure into a solid medium, contraction ceased to be any proper object of dread."

"Upon this point sufficient evidence is presented by the operations of the national banks since the resumption of specie payment. Of these operations, the great results are clearly shown in the diagram issued with the Comptroller's report for 1886.[1] Inspection of this diagram shows an enormous expansion of the general scale of transactions by the banks since 1879. This expansion has come only in a moderate degree from the application of new banking capital; it has come in spite of the sinking of the line which describes the changes in circulation, and chiefly from the sharp rise of the line of deposits during the flush period from April 1879, to December 1881, and again from the fall of 1884 to the present time [with the exception of the period of depression beginning with 1893]. The elastic power of the deposit currency, and the certainty with which it fills the void left by the disappearance of paper, could not be illustrated better than by the soaring of [the line for deposits] as the [one for circulation] sinks, upon [the Comptroller's] chart."

[1] The diagram given by the Comptroller in 1886 is continued in the Report for 1897. For reproduction of this diagram see p. 207 of the present volume.

95. "The legitimate inference from these considerations is not, however, that the disappearance of the bank note, or the substitution of government paper for it, is to be viewed with indifference. The business of a country in which the banking habit is firmly seated, will, it is true, find a medium of exchange, and in the amount needed ; but it is of great consequence that the medium used should be made up of the kinds most convenient for the use of the community, and divided between those kinds in the proportions most convenient. This question of proportion is one which no combination of counselors, public or private, can determine. No legislature and no conclave of bankers can say that the people of the United States require any given amount of notes for the management of their exchanges. The amount which is sufficient this year may, and almost certainly will, be either insufficient or in excess the next ; and it is partly from a sense of the absolute inability of any human foresight to deal with this problem, that we owe the multitude of schemes proposed in years past 'to adapt the amount of the [paper] currency to the needs of the country.' "

96. "Left to itself, the country settles this problem of proportion in a natural way, by the demand which each individual using a credit currency of any kind will make for notes or for a deposit account, as his special conditions may require. But, in order that this natural process should go on easily and without inconvenience to the community, it is requisite that the banks or bankers with whom individuals deal when obtaining loans or receiving payments should have the ability to respond to demand in either form ; in other words, that the creditor of the bank or banker should be able to receive the evidence of his claim in the one form, if he expects to use it in large operations or in a closely settled community, or in the other, if in small operations or where hand-to-hand dealings are the rule, and that the lender should find his profit equally in responding to either demand. It is only by being allowed to take one or the other form, as occasion requires, that a given mass of bank credit can perform its functions with the maximum of public advantage. There may be sound reasons of a different order for not giving the

power of issue in both forms to every company or individual carrying on the business of banking; in other words, the ideal of a perfectly free system of banking is no doubt beyond reach; —but that, for the greatest advantage of the public, the issue of notes by banks should be widely enough diffused to present in every considerable district which uses banking facilities at all the easy choice between the two methods of using credit, seems to be beyond dispute. This choice is given only when the power of issue is substantially in the same hands which control the loans and the business of banking generally. It is, in fact, one of the great services rendered by the national banking system that, for a most critical quarter-century, it carried note-issue and deposit banking side by side throughout the greater part of the country, under the management of a class of remarkably sound institutions, giving to the community many of the benefits of free banking, with the minimum of its risks. As a substitute for this system, the issue of notes by the Treasury is as little to the purpose as the striking of coins by the mint; nor is there any machinery by which the operations of the Treasury can be made tc perform the desired office. Happily, those operations are quite distinct from the commercial movement of the country, and are unsuited by their nature for any closer connection with it, even if such connection were expedient."

EXPANSION OF NOTE ISSUES.

97. The issue of bank notes is frequently regarded as a means by which banks exercise an injurious influence upon the commercial community. This is one of several ideas which seem to proceed from an incorrect analysis of the nature of the bank-note. These may be divided into two general groups representing (1) the assumption that notes can be issued and maintained in circulation to any amount by banks at will, and (2) the belief that these notes have a direct influence upon business conditions and tend to bring on commercial crises.

98. The idea that notes can be issued by banks to any amount proceeds from an ignorance of the methods of banking. No legitimate bank would distribute its notes without receiving in exchange equivalent values,[1] nor could it get them into circulation and keep them out, unless persons desirous of exchanging such values for the notes presented themselves. It might be said that the bank could pay them out in discharge of its debts, its expenses, etc. This, however, could not be done unless by the consent of those whom it owed. And, inasmuch as the bank would not legitimately be in debt, or have such expenses, except for the inconsiderable matter of services or office furniture, etc., such payments would in any case be small in amount. In general, then, it may be said that, in ordinary business, the notes can be issued only if there are borrowers who are willing to accept them, and they can be kept in circulation only if those

[1] In this discussion, the question of wilful fraud and issue of notes by banks without receiving (supposedly) valuable assets in exchange therefor has been omitted Even in such cases the security of the currency would, under the plan of the Commission, be fully assured. This will appear at a later point. Protection to the other banks of the system could, of course, be obtained in such cases only by suitable regulations governing examination, inspection, reports, etc., and above all by giving to the Comptroller authority to grant bank charters only in instances where he is well satisfied that the incorporators of the bank are honest in their intentions. Such discretion lodged in the hands of the Comptroller would, however, if intelligently exercised by him, be a sufficient protection against fraud or wilful issue of notes without security.

to whom they are paid have use for them as currency and consequently do not deposit them or present them for redemption. Though the amount of bank-notes for which the public thus has use varies from time to time, it is unquestionably true that at any given time, with the business conditions then existing, this amount is something quite definite, and any issue in excess thereof will be returned to the banks for redemption or deposit. Consequently, though the notes are put into circulation through the mechanism of loaning them to borrowers, it is nevertheless true that banks cannot increase their note issues by such loans —no matter how many borrowers may present themselves— unless there is a willingness on the part of the public to absorb and use increased amounts of bank-notes. For otherwise the notes paid out to a borrower today will be returned to the bank for redemption or deposit tomorrow, and the result would not be a loan met by notes, but a loan met by cash from the bank's reserve or by the creation of a deposit account. In this way the loans of a bank beyond the amount of its capital are limited by whatever it can borrow through its notes or deposits (in excess of such portion thereof as it requires for a cash reserve), and not, as sometimes supposed, its notes and deposits by its loans.

99. The amount of deposits standing to the credit of individuals on the books of the bank must be regulated in a similar way. In a previous section (87) the identity of the note and deposit has been pointed out. Neither note nor deposit will be created save in response to a demand from the business public and both fulfill the same purpose. Whatever objection applies to the too great increase of the one applies equally to the over-expansion of the other. There is therefore no special or peculiar danger in the over-issue of notes, not existing in the case of deposits. It should also be remembered that at the present time the part played by notes relatively to deposits is unimportant. Since deposits and notes are alike forms of purchasing power and since the deposit is now so much more extensively used than the note, the absolute danger from the over-expansion of deposit-liabilities is immensely greater than that of the over-

issue of notes. Not only are bank notes at the present time quite unimportant when compared with deposits (in the United States and Great Britain at least), but, with modern restrictions on the issue of notes, the expansion of this form of liability to anything like equal importance with the deposit-liability is impossible.

This may be clearly seen from the following computation; which represents the situation of a bank of $100,000 capital operating under a system where its note-issues are limited to 80 per cent. of the capital as recommended by the Commission. The bank may be supposed to do

1. A deposit business only.
2. A note-issue business only.
3. Both a deposit and a note-issue business.

I. Suppose that the bank has a capital of $100,000, paid up in cash; that it issues no notes, and that it receives no deposits of actual cash, but that it utilizes its capital as a 25 per cent. reserve against the deposits which it creates in the process of making loans. Under these conditions this bank could make loans amounting to $400,000, its situation being as follows:

Resources		Liabilities	
Specie, - - -	$100,000	Capital, - - -	$100,000
Loans and discounts, -	400,000	Deposits - - -	400,000
	$500,000		$500,000

II. Suppose that the bank has no deposits at all but issues notes, under the plan proposed in this Report, to the amount of 80 per cent. of its capital, holding a 25 per cent. reserve. It could then loan, in addition to the $80,000 notes, the balance of its capital after deducting the $20,000 necessary to keep as a reserve. Its situation would then be:

Resources		Liabilities	
Specie, - - -	$ 20,000	Capital, - - -	$100,000
Loans and discounts, -	160,000	Notes, - - - -	80,000
	$180,000		$180,000

III. Should this bank do both a note and deposit business, notes to the amount of $80,000 being issued and 25 per cent.

reserve being held against both deposits and notes, its accounts would stand thus:

Resources		Liabilities	
Specie, - - -	$100,000	Capital, - - -	$100,000
Loans and discounts, -	400,000	Notes, - - - -	80,000
		Deposits, - - -	320,000
	$500,000		$500,000

This is precisely the situation found to exist in supposition I, save that some of the loans are now made by means of a note-issue. It thus appears that the possibility of expansion would not be increased by the note-issue.

100. The responsibility for any injury from over-expansion, moreover, lies with the public. It has just been seen that the creation of note- and deposit-liabilities occurs only in response to a demand from the side of the public. In the same way the cancellation of them is entirely within the power of the public. If either notes or deposits increase to an extent which the public finds greater than it needs, their cancellation will be required of the bank through the mechanism of redemption; and in general cancellation will be so required, since to keep an unnecessarily large volume of them in existence involves a loss of interest to the community.[1]

But whatever the dangers of an over-expansion of notes and

[1] It is true that convenience may dictate the holding of some purchasing power for a time idle. The notes being immediately available as money, and it being possible to use them on many occasions where checks could not be utilized, there is a possibility that they may be kept in the pockets of the people who use them, for a considerable time, and thus be assured a long period of circulation before they are returned to the bank for payment. The length of this period, however, is often overestimated and it is seldom recognized that the liability created in the form of a deposit is also likely to remain a long time inactive before it is checked upon or transferred to others. Scarcely more than one-fifth of the aggregate deposits of the country are daily checked upon. At this rate it would therefore require five days to move the whole mass. But this one-fifth is, in very large proportion, the most active part of the deposits, while on the other hand there are many mere transfers in which the bank simply alters a book credit, and is not obliged to redeem a check either by the payment of cash or by offsetting it against checks on other banks which may have been deposited with it. There is thus quite as great a possibility that owners of claims against banks in the form of deposits may for some time refrain from demanding the cancellation of these claims as in the case of owners of claims in the form of notes.

deposits may be, the two considerations just indicated should constantly be borne in mind, (1) the extent to which these liabilities will be created cannot be increased except in response to the demand of the community, and (2) the return of its promises to the bank for redemption is dependent wholly upon the desire and judgment of the holders. Both notes and deposits arise mainly from the loan operations of the bank. The fear of the increase of notes, therefore, amounts merely to a fear of the over-increase of bank loans.

101. A question, however, then arises concerning danger of the over-increase of bank loans. Without inquiring what the influence of an over-increase of bank loans in assisting to bring on a crisis may be, one or two things may be taken as established. It has been shown that loans leading to the issue of notes would be no different from loans followed by the creation of deposit liabilities, and that the danger, if any, arising from the issue of notes or the making of loans represented by deposit liabilities depends chiefly on the spirit of the community as a whole. It may be argued that the bank should act as a regulator and should deter the community from carrying on business upon a defective basis. This is precisely what it attempts to do. As already seen, no bank will make a loan whether in cash, or by the issue of notes, or by the creation of a deposit account unless it receives in exchange property, or what it considers a certainty of obtaining property. The judgment of bank managers may be bad and they may in consequence grant loans upon over-valued property, as a result of which they may be unable to collect the amount due them. That is to say, they may pay, or promise to pay, something without receiving an equivalent, but in general they will not do this. Moreover, if redemption is exacted of the bank at every step as it goes on increasing its liabilities, it will be absolutely unable to enlarge its business to an unwarranted extent. Especially will it be unable to force into circulation more notes than are actually demanded by the community as a medium of exchange, since any surplus will at once come back to the bank for redemption. The real danger is that the bank may mistake the character of the supposed

purchasing power in the hands of the would-be borrower and may lend to those who are not actually in possession of values to an equivalent amount.

102. This furnishes a clue to the origin of the fear of bank issues. As has already been remarked, this fear is an old one. It in fact developed during the earlier years of the present century at a time when the note was the principal means by which banks made loans and when the use of deposits was still in its infancy. In this period the mistakes sometimes made by banks in granting credit became confused with the mechanism by which it was granted. People came to think that the notes themselves and not the fact that they did not represent realizable property was the cause of the difficulties ensuing upon a speculative period. This idea has persisted to the present time. The outcome of the fear of expansion of bank-issues was seen in the English Bank Act of 1844 in which the conditions of the issue of notes were carefully prescribed. Yet the fact that the difficulties of the situation lay deeper than the mere possibility of excessive note-issues may be seen in the regular recurrence of periodic crises following periods of industrial over-excitement in England since the passage of the bank act just as before it.

PROFIT ON BANK NOTE ISSUES.

103. It is frequently asserted that the national banks secure an exorbitant profit upon their note-circulation. Many argue that the prohibitory tax of 10 per cent. on state bank issues which confines the privilege of issuing circulating notes to the national banks, grants a monopoly to a limited number of institutions whereby a "double profit" is obtained, (1) by receiving the interest upon the bonds deposited as security for the notes, and (2) the interest at current rates on the notes when issued for loans.

At the very outset, however, it is impossible to speak of a profit arising from the issue of notes as distinct from the general operations of banking. The source of profit resides in the discount operation; in the process of buying a right to receive money in the future in return for giving an immediate right to draw means of payment. The extent to which this can go on is limited only by the amount of resources left with the bank by others over and above necessary reserves. The lending, or investing of these amounts, brings a profit. It is sheer ignorance of banking operations, therefore, to assert that the banks make a profit out of the notes issued. It is true that one form of liability by which loans are consummated is notes; but the profit could be made equally well by a deposit account, without the issue of a single note.

The only possible ground for saying that banks make a "double profit" is the fact that a bank loans not only its own capital, but also any funds left with it by the community (uncovered by necessary reserves). A bank lending only its own capital would be scarcely more than a loan company; and would earn scarcely more than enough to pay expenses, to say nothing of dividends. To earn ordinary dividends a bank must, by some means, be able to loan funds beyond its capital. If it can issue notes which remain outstanding at a regular

amount, to that extent it thereby gets funds from the community which it can lend. Or, if it by loan operations creates deposits, which are not drawn out, but are used as a currency by means of checks, then it finds itself in possession of funds which it can loan on good, short time paper.

104. Where banking is perfectly free, therefore, and goes on subject to no restriction, the profit arising from a loan is the same whether the funds retained by the bank are balanced by liabilities of notes, or of deposits. When, however, banks are obliged to invest their funds in a specified sort of security in order to obtain notes, the result is a loss of profit equivalent to the difference between the rate of interest paid by these securities and that currently paid by ordinary commercial paper. For the security in which the bank is required to invest as a guarantee for its notes will of necessity bear a low rate of interest on the investment, if this is of such unquestioned value as to afford greater safety to the note holder than would ordinary commercial paper. This is precisely the case with the national bonds which banks are now compelled to deposit before taking out notes. Inasmuch as the average rate of return on an investment in national bonds is now less than 3 per cent., while in practically all parts of the country the rate on ordinary commercial loans is appreciably higher than that, it results that, because of the requirement to buy bonds, the bank earns less upon its resources than it would if they were invested in ordinary commercial paper. The profit to the bank depends wholly upon how its resources over and above its cash reserve can be invested, and the obligation to invest a part of its resources in low interest-bearing bonds as a security for its notes is a means of preventing it from putting the same resources into better-paying investments, and consequently reduces, rather than "doubles," the profit of a bank. Even if this explanation were not conclusive, the fact that national bank circulation has been largely reduced, and that where the commercial rate of interest is high, the banks take out no more notes than the minimum amount necessary in order to hold their charters, should entirely destroy the ground for this erroneous belief.

105. While it is true that the profit arising from the issue of notes cannot be dissociated from that gained through the exercise of the functions of discount and deposit, and since it is impossible to speak of a separate profit as arising from the notes, it may be practicable to estimate what, under current conditions, might be the maximum profit derivable from taking out notes on the basis prescribed by the present system, as compared with a banking business where an equal amount of deposits was used or with loaning the funds directly. Supposing a bank to use only notes, and no deposits at all, it may be possible to see the truth of what has been above explained. If the 4 per cent. bonds of 1907, which are mainly used as a security for notes, were to sell on a 3 per cent. valuation, it would require in July, 1898, $107,861 to buy $100,000 of bonds, on which only $90,000 of notes can be issued. The account would stand as follows, under the present law:[1]

I. NOTES AND NO DEPOSITS.

Bonds at 3 per cent.......	$107,861	Capital..................	$100,000
Loans at 6 per cent.......	68,639	Notes....................	90,000
5 per cent. redemption fund,	4,500		
10 per cent. reserve.......	9,000		
	$190,000		$190,000

Income:		
On bonds..................................	$3,235.83	
On loans..................................	4,118.34	
		$7,354.17
Deduct:		
Special Expense on Notes:		
Taxation..................................	$900.00	
Redemption................................	48.15	
Plates....................................	7.50	
Express charges...........................	3.00	
		958.65
Net income................................		$6,395.52

[1] From the available capital and notes amounting to $190,000, there must be subtracted the reserve, the redemption fund, and the cost of the bonds in order to ascertain how much could be loaned ($68,639).

Then contrast the above account with one in which no notes are used, but only deposit accounts:

II. DEPOSITS AND NO NOTES.

Loans at 6 per cent	$176,500	Capital	$100,000
15 per cent. reserve	13,500	Deposits	90,000
	$190,000		$190,000
Income on loan	10,590		

Thus the advantage in favor of the deposit system would be $10,590 minus $6,395.52, or $4,194.48, while the loaning of the original capital of $100,000 at 6 per cent. simple interest (without the necessity of forming a bank) would have brought a return of $6,000—only $395.52 less than that earned by the bank of issue.

106. It has been previously explained that deposits perform essentially the same function as notes, though in a different way and with a different class of people, and that the profit arising to the bank is the same whether its loans are made possible by the use of notes or of deposits, where the use of both is free. It follows that those banks whose customers demand their loans in the form of notes will be placed at a disadvantage (relatively to those using deposit-accounts), and in order to make the same rate of profit as the banks which are not obliged to issue notes they would be forced to charge borrowers a higher rate of discount upon loans. That is, the tendency of the present national banking law is to make the issue of notes more expensive, and this in the end falls upon borrowers. And as it is in less thickly settled regions that notes rather than checks are chiefly used, it follows that at the present time country banks are at a relative disadvantage as compared with city banks, and their customers are at a relative disadvantage as compared with those of the city banks.

Recurring to the illustration given above, it will be seen that a bank of $100,000 capital with $90,000 of deposits, if its expenses were $5,000 could make loans to the community at 6 per cent. interest and yet make a dividend of 5.59 per cent. on

its capital; while a bank with no deposits, but issuing $90,000 of notes under the present system, with the same expenses and $900 additional taxation, in order to make the same dividend upon its capital stock (5.59 per cent.) would have to obtain an average of 12.02 per cent. on the loans which it makes to the community.

This state of affairs works injustice in another way by subjecting banks in different portions of the country to different conditions. It is a direct inference from the computation concerning the profit derivable from a note-issue, given at an earlier point, that the higher the rate of interest current in a specified locality, the less is the inducement under the present system to issue circulation in excess of the minimum required by law, and *vice versa*. This follows directly from the fact that since the fixed charges, such as tax, redemption fund, etc., remain the same in every case, the higher the rate of interest the greater the inducement to elect the direct investment of the capital in carrying on the ordinary business of the bank in preference to using it for the purchase of bonds and issue of notes. This may readily be shown by a computation similar to that already given, the rate of interest used being 10 per cent. instead of 6, as before. With this rate of interest the situation would be as follows:

I. NOTES AND NO DEPOSITS.

Bonds at 3 per cent.,	$107,861	Capital,	$100,000
Loans at 10 per cent.,	68,639	Notes,	90,000
5 per cent. redemption fund,	4,500		
10 per cent. reserve,	9,000		
	$190,000		$190,000

Income:		
On bonds,	$3,235.83	
On loans,	6,863.90	
		$10,099.73
Deduct:		
Special expense on notes, as before,		$958.65
Net income,		$9,141.08

II. DEPOSITS AND NO NOTES.

Loans at 10 per cent., -	$176,500	Capital, - - -	$100,000
15 per cent. reserve, - -	13,500	Deposits, - - - -	90,000
	$190,000		$190,000
Income on loans, -	$17,650		

The advantage in favor of the deposit system in this instance is thus $8,508.92, a sum nearly twice as large as that representing the advantage of the deposit system where the rate of interest was 6 per cent.

Not only this, but where the rate of interest is 10 per cent. the net income ($9,141.08) derived by such a bank would actually be $858.92 less than the bank would have obtained by loaning out its original capital at simple interest without taking out notes at all, or using any portion of it as a reserve upon which to build up deposits. In other words, after going to the expense and trouble of organizing a bank, the income (before taking out the expenses of the bank) would be found to be less than the return from an investment of the capital in simple loans, without forming a bank.

107. The consequences flowing from the state of things just described are sufficiently familiar. Interest is of course highest in those states where capital is least abundant. But it is precisely there that business is least highly developed, and hence that the check and deposit system is less advantageously used. This inability to use checks implies a need for a greater supply of note-currency, which, under the present system, is very unlikely to be issued, inasmuch as the resources of the bank can be employed in some other form to much better advantage. It is due to this that the circulation of Western banks, situated where currency is most wanted, is generally kept close to the amount corresponding to the legally required minimum bond-deposit, while that of Eastern banks, where money and money substitutes are more abundant is, proportionately to capital, much higher. In order to display more clearly the curious way in which the national banking system as at present organized, fails to perform the function of furnishing currency where it is wanted, the follow-

ing table has been computed from the data given by the Comptroller of the Currency in the report for 1897:

TABLE SHOWING EXTENT TO WHICH BANKS IN DIFFERENT SECTIONS ISSUE CURRENCY IN EXCESS OF THAT CORRESPONDING TO THE MINIMUM BOND-DEPOSIT PERMITTED BY LAW.

Groups	No. of banks	Capital	Maximum issue permissible	Issue on required bond deposit	Circulation actually issued	Amount actually issued in excess of issue on required bond deposit	Amount which might be issued in excess of issue on required bond deposit	Percentage of permissible issue, in excess of issue on required bond deposit, which banks actually issue
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
EAST.								
New Hampshire..........	50	$5,830,000	$5,247,000	$1,311,750	$3,514,295	$2,202,545	$3,935,250	55.9%
Vermont..............	49	6,985,000	6,286,500	1,324,125	3,765,422	2,441,297	4,962,375	49.2
Rhode Island (outside Providence)	33	4,715,250	4,243,725	1,014,750	2,756,868	1,742,118	3,228,975	53.9
	132	$17,530,250	$15,777,225	$3,650,625	$10,036,585	$6,385,960	$12,126,600	52.6
WEST.								
Nebraska	104	$10,475,000	$9,427,500	$1,828,125	$2,028,893	$200,768	$7,599,375	2.6
Kansas	103	8,567,100	7,710,390	1,691,347	2,111,454	420,107	6,019,043	6.9
Missouri (outside St. Louis)	57	6,415,000	5,773,500	1,162,125	1,377,890	215,765	4,611,375	4.7
	264	$25,457,100	$22,911,390	$4,681,597	$5,518,237	$836,640	$18,229,793	4.6
SOUTH.								
North Carolina..........	27	$2,701,000	$2,430,900	$585,225	$643,492	$58,267	$1,845,675	3.2
South Carolina..........	16	1,898,000	1,708,200	393,300	451,025	57,725	1,314,000	4.4
Florida	15	1,150,000	1,035,000	258,750	300,830	42,080	776,250	5.4
Alabama (outside Selma)..	25	2,955,000	2,659,500	591,750	697,670	105,920	2,067,750	5.1
Mississippi	10	855,000	769,500	192,375	216,410	24,035	577,125	4.2
Arkansas..............	9	1,220,000	1,098 000	252,000	258,890	6,890	846,000	0.8
	102	$10,779,000	$9,701,100	$2,273,400	$2,568,317	$294,917	$7,427,700	3.9

As will be seen, returns for three groups of states are given, one a typical Eastern group, one Western, and one Southern. The fourth column gives the maximum circulation which under present laws it would be possible to issue, *i. e.*, 90 per cent. of the par value of the capital stock of the banks. Column 5 represents the circulation corresponding to the minimum amount of bonds required to be deposited by the banks according to law. Column (6) shows the circulation actually issued. The difference between the circulation actually outstanding (6) and that corresponding to the required deposit of bonds (5) represents the amount which, under current conditions the banks are induced to issue over and above actual legal requirements, and is given in column (7). The difference between the possible maximum (4) and the circulation upon the legal minimum of bonds (5) is given in column (8), and represents what the banks might issue if conditions made it sufficiently profitable to induce them to do so. The percentage of column (8) represented by column (7) indicates what proportion of this possible surplus above legal requirements the banks are actually induced to issue, and is given in column (9).

It is unnecessary to repeat that the Western and Southern states are those where the need of currency is most pressing. Yet as appears in a most striking fashion from the table just given, it is precisely in the Western and Southern groups of states that national bank note-currency is not issued. The highest percentage for any Southern state here given, as appears from column 9, is 5.4, whereas the lowest for an Eastern state is 49.2, or more than nine times as much.

In brief it must be admitted that the notion which ascribes higher earning powers to the issue function of banks under any system and especially under the present one, must be regarded as incorrect. Under a system of bond-secured circulation, it is absolutely without foundation.

108. The charge of a double profit upon circulation has already been shown to be erroneous, except in so far as it is a complaint against the principle underlying the existence of all banks. As applied in its most extreme form to the present national banking

system as a system enjoying some peculiar privileges in contradistinction to the old state-bank system, the idea of a double profit is absurd. As has been said by a recent writer,[1] "there was nothing to forbid any of the old state banks from getting interest in exactly the same manner. They were allowed to buy as many United States bonds as they wished, but bought few, if any, as they got higher interest on other investments. They also had the right to deposit such bonds with a trustee as security to the note-holder. The only difference between the old state banks (other than free banks) and the present national banks, is that the former might, if they thought fit, invest in United States bonds, which they rarely did, and pledge them to the note-holders, which they never did; while the national banks are compelled to do these things."

109. From what has gone before, it must be clear that a high or low rate of interest in the loan market as compared with the fixed returns from high-priced bonds, will affect the willingness of national banks to issue notes. If the commercial rate of interest is high, and the returns from bonds are low, there will be small incentive to use their notes. It now remains to indicate some of the causes affecting the prices of United States bonds, in order to understand how the profit of banks, and thereby the amount of circulation outstanding, is affected.

Changes in the price of bonds will take place from causes producing a disparity between the rate of interest paid by the bonds and the prevailing rate of interest for equally safe investments in the community. When our debt was refunded by the act of 1870, 4 or 4½ per cent. was regarded as a low rate in view of the credit of the government. Since then, the credit of the country has improved, or the normal rate of interest on such securities has fallen. But those bonds paying, *e. g.*, 4 per cent. when the normal rate in the community is only 3 per cent. will sell at a premium (varying from par in the case of bonds which may be paid at any time to about 120 for a bond having 30 years to run, and 133⅓ for a perpetuity). And if the permanent

[1] Louis N. Dembitz of Louisville, Ky., in a communication to the Monetary Commission.

rate in the market falls below 3 per cent. the price of the 4 per cent. bonds will rise still higher; in fact these bonds have risen as high as 130 or higher. The price of such a bond is a measure of the normal rate of interest on equally safe securities. For this reason bonds, when issued at a rate above that normally paid for such securities at the time of issue, frequently command a heavy premium at the very outset. Thus, for instance, the bonds issued in 1894 at once sold in open market at a premium of 17 or more. These bonds bore interest at the rate of 5 per cent., the Secretary of the Treasury being limited by the terms of the Resumption Act and the preceding Refunding Act (of 1870) to bonds bearing certain rates of interest. Inasmuch, however, as the credit of the government was better, while market rates were lower than in 1870–5, 5 per cent. was considerably above the rate current on such bonds, and they therefore sold at a premium. The amount of this premium was such that, taking into account the rate paid by the bond and the time it was to run, exactly the market rate would be earned upon the total amount actually invested in the bond. Speaking technically, the value of the bond was thus automatically "equalized" upon the market rate, or reduced to the basis of that rate.

The term for which a bond runs, moreover, has an influence on its price. If it is a short-term bond, as the date of maturity approaches when it will be paid off at par the premium will steadily fall until it drops to what will be paid for it. A bond bearing 6 per cent. would not sell above par when near to maturity, while a 4 per cent. long-term bond sold to take its place might command a high premium. A bond paying a slight amount above the market rate of interest is worth a higher price varying somewhat in proportion to the term of years in which it continues to pay this additional gain. When bonds are payable at call it is impossible for them to command any appreciable premium.

110. The profit to a bank on issuing notes, however, is affected by the price of the bonds which it is obliged to deposit before obtaining its notes. Inasmuch as only 90 per cent. can be issued

on the par value, 10 per cent. of the investment is locked up. But if the bonds sell for 124, then there is a margin above 90 per cent. of about 34 which is locked up. The higher the price of the bonds, the more the dead margin, on which no return can be obtained, becomes; and in proportion as the price paid for the bonds is high the return on the investment is low. That is, even if the bonds to be deposited bore 3 per cent. interest and could be purchased at par, the present system would require a bank wishing to issue $90,000 of notes to invest $100,000 at 3 per cent. interest; while if the bonds were 4 per cent. bonds of 1925 selling on a 3 per cent. basis at 120 it would require that, as a condition of issuing $90,000 of notes, $120,000 must be invested at 3 per cent. The more the profit diminishes, the less are notes taken out. Consequently, in the years since 1870 when the credit of our government was improving, and while the rates on safe investments have been falling—for reasons quite outside the control of the banks—we have witnessed the steady decline in the volume of the national bank notes. At a time when the business of the country was expanding the notes were declining.

For these reasons, the Commission has recommended that so long as bonds are required as security for notes (10 years) they should be reduced to a basis of 3 per cent., thereby lessening the gap between the market value and the amount of notes which can be issued on their deposit. And in all cases where bonds are authorized to be sold by the Secretary to replenish the reserves of the Treasury, it is urged that they be issued for short periods, and at as low a rate of interest as the market will warrant.

HISTORY OF THE NATIONAL BANKING SYSTEM.

111. The origin of the national banking system is to be attributed to two distinct causes: (1) The desire to extend and improve the market for government bonds; (2) to provide a safe national currency of uniform value.

In consequence of the banks' locking up their funds in unsalable bonds in 1861, and of other circumstances which will be discussed at a later point, the banks and the Treasury had been forced to suspend specie payments at the end of that year. In order to obtain revenue for war purposes, there were three courses open to the government: (*a*) To resort to increased taxation; (*b*) to sell bonds or other government obligations; (*c*) to issue government notes of some sort. Of these three means of raising revenue, the first was not much relied upon by Mr. Chase, while the second had from the beginning been that on which he intended to place most dependence. Nor had he desired to issue legal-tender notes.

Thus it was of the first importance that, if bonds were to be the government's chief resource, the market for them should be improved. There was also, from the very first, the desire for a sound and uniform currency. The existing bank-notes were issued by 1600 different institutions operating under State laws possessing little similarity. Currency which was perfectly good in certain portions of the country would not pass at all in others, while there was in many sections an immense volume of worthless paper in circulation. Both the need of a better market for bonds and the demand for a suitable note-currency were intensified by the issue of the legal-tender notes. The government had drifted into this means of obtaining funds without consideration. The issue of the legal tenders weakened the credit of the government, drove out of circulation what gold remained, and left the country without any universal currency save the legal tenders themselves. These, however, it was no

part of the government's policy to retain permanently in circulation. They had been issued only as a temporary forced loan, without interest, and the danger of increasing them, or even of retaining them in circulation, was constantly in the minds of the legislators of the time. It was desired to replace these issues by a note-circulation which, as hinted in the title of the National Bank Act itself, should furnish a "national currency." At the same time the shock to the government's credit resulting from the issue of the legal tenders had unfavorably affected the sale of bonds and, with other events, made it important to devise some means of stimulating the market for them. The National Bank Act was intended, therefore, to meet the want of a currency and to increase the demand for bonds.

112. The plan for a national banking system had been early advanced. All through the first stages of the war it had been Secretary Chase's favorite measure. He had thought of it at least as early as the summer of 1861; and it had at that time been strongly opposed by the New York banks. Nevertheless he had recommended it in his report for that year,[1] and the bill was in preparation before the first issue of legal-tender notes,[2] but, inasmuch as it demanded much time for its completion, it had been delayed. The Secretary's report for 1861 stated the essential feature of the plan to be "the preparation and delivery to institutions and associations of notes prepared for circulation under national direction," etc., "secured as to prompt convertibility into coin by the pledge of United States bonds and other needful regulations."[3] Mr. Chase recurred to the subject in his report for 1862. A bill embodying a plan somewhat similar to his had already been brought before the House in July, but had received no attention. The Secretary urged that "no very early day will probably witness the reduction of the public debt to the amount required as a basis for secured circulation."[4] When that time should arrive the debt might be

[1] *Report of Secretary of the Treasury*, 1861, p. 18–19.

[2] BOLLES' *Financial History of the United States*, III, p. 43.

[3] It had been Mr. Chase's original plan to force state banks to secure their issues by basing them upon United States bonds.

[4] *Finance Report*, 1862, p. 20.

retained at low interest, or some other security could be provided. For the present, the new plan would furnish a suitable currency and assist in the negotiation of bonds. At first the operations of associations organized under the new act were "to be restricted to investing United States notes in bonds, issuing a circulation based on these[1] bonds and transacting ordinary business." Thus the price of bonds would be enhanced, and thereby great relief to the government was anticipated from the measure.

113. Several bills embodying in different forms the idea thus recommended by Mr. Chase were introduced into the Senate during January and February 1862, but all failed of passage Finally a bill was introduced by Mr. Sherman January 26, 1863, which was sent to the House February 12, and became a law on the 25th.

The characteristic point in the new system was the requirement that the banks should buy national bonds, deposit them with the government, and receive back circulating notes for issue. Although the plan had already been tried in New York, and had given tolerable satisfaction, yet it was found to be obnoxious at the outset. The unfortunate experiences of several Western states, which had tried the system with disastrous results, overcame any favorable impression which the experience of New York may have made. Some time, moreover, was lost in elaborating the new system and in preparing the circulating notes Opposition had time to mature, and when Mr. McCulloch, the first Comptroller of the Currency, was finally ready to proceed with the organization of the system, he found the state banks almost united in opposing it. It was feared that the working of the new national system would be a repetition of the disastrous experience with earlier bond-deposit systems; that the national banks might be ruined in case of the success of the rebellion; that Congress might interfere with the banks, and that they would suffer by the change of name.[2] The last point was finally

[1] For an account of the debate on the National Bank Act of 1863, see *Journal Pol. Econ.*, Chicago, 1894, p. 250 *et seq.*

[2] McCulloch's *Men and Measures of Half a Century*, p. 168.

conceded by Mr. Chase. He agreed to allow the organization of banks, without a further change of name than the addition of the word "national" to their titles. Still the banks were not willing to enter the system. Not until July 20, 1863, was the first charter granted and authorization given to the First National Bank of Philadelphia to begin business. Several Western banks received charters within the succeeding month, but very few charters were asked for by banks in New York. In August 1863, twenty-six banks were reported in process of organization.[1] During the year 1863–4 the process of organizing new banks and reorganizing old ones proceeded with painful slowness.

On December 5, 1863, at a meeting of bank officers in New York, a committee which had been ordered to "take into consideration the National Bank Currency Act as to its prospective effects upon the currency of the nation and the national credit, and what action, if any, devolves upon the banks in the premises," reported that, as the banks applying for charters were mostly of small capitals and located in the West and South, it was plain that the act would foster a system of "wild-cat" banking. It was said that the notes, not being a legal tender, would depreciate, and that their use would involve a loss to the government of the interest on an equal amount of legal-tender notes. This report was accepted by the New York Clearing-House, and had some effect in deterring state banks from entering the system.[2] The slowness with which the extension of the system proceeded, however, was, at least in part, due to the defects in the law itself. They were too grave to be overlooked, and to ensure the success of the system immediate action was needed. A bill for the improvement of the act of 1863 was reported in the Committee of Ways and Means on March 1, but did not become a law until June 3, 1864.

114. The new act retained most of the features of the act of 1863, but changed it in several respects and added various new

[1] HUNT'S *Merchants' Magazine*, Vol. 49, p. 139.

[2] Compare KNOX'S *History of Banking in the United States;* Rhodes's *Journal of Banking*, 1892, p. 630.

provisions. As finally amended the main provisions of the act were as follows: There was to be established a separate bureau to be presided over by a "Comptroller of the Currency," to which should be committed the charge of the "issue and regulation of a national currency based on United States bonds."[1] The currency was to be issued by institutions known as "National Banking Associations," to be organized by any number of persons not less than five. No bank with less than $100,000 capital was to be organized in places of from 6,000 to 50,000 inhabitants, and none with less than $200,000 in places of more than 50,000 population. Only in towns of less than 6000 population was the organization of banks of $50,000 capital to be permitted. The incorporators before being authorized to begin business were to transfer to the Treasurer bonds of the United States to an amount of at least 30 per cent. of the paid-in capital stock of the bank, receiving back circulating notes to an amount equal to 90 per cent. of the market value of the bonds transferred, but never exceeding the par of the capital stock paid in. This act also required 50 per cent. (instead of 30 per cent.) of the capital to be paid in before the bank could commence business, and required the balance to be paid in at the rate of one-fifth each month. (The act of 1863 had required this unpaid balance to be paid only at the rate of 10 per cent. of the capital stock every two months.) The total issue of notes was not to exceed $300,000,000 in amount, one-half to be apportioned to banks according to the representative population of the states in which they were located, and one-half "having due regard to the existing banking capital, resources, and business of such states." The notes were to be redeemable in lawful money on demand, and were receivable in all payments to the United States, except for duties on imports. Shareholders were to be liable for double the amount of their stock. Country banks were to keep on hand in lawful money an amount equal to 15 per cent. of their outstanding notes and deposits (instead of 25 per cent. as provided by the act of 1863), and might redeposit three-fifths of this 15 per cent. with other national banks in certain

[1] Act of February 5, 1863, *Statutes at Large*, pp. 665 *et seq.*

specified large cities (increased in number from nine to seventeen). Banks in these seventeen cities were to have a nominal reserve equal to 25 per cent. of their notes and deposits, but might redeposit one-half of such reserves in New York. The act also compelled every bank in the seventeen cities to provide for the redemption of its notes at par by some bank in New York, all other banks being obliged to redeem in some one of the seventeen cities themselves. State banks might enter the new system by adopting as their title the word "national" with the proper numeral prefixed and complying with certain regulations. The earlier act had permitted the issue of no notes of denominations less than $5. The act of 1864, however, allowed the issue of notes of $1, $2, and $3 until specie payments should be resumed, not exceeding in aggregate amount one-sixth of the capital of the bank.

115. Banks, however, still came into the system less rapidly than had been hoped. At the end of 1864, 282 new banks were reported organized, and 168 state banks converted. The total capital stock of the national system was then $108,964,597.28, the circulation $65,864,650, the bonds securing this circulation $81,461,450. At the outset Secretary Chase had estimated that $250,000,000 of bonds would be absorbed by the new system of banks. This expectation was not fulfilled until the end of 1865. In the report of that year the Comptroller announced the organization of 283 new banks and the conversion of 731 state banks, making the total, on November 1, 1865, 1601, precisely the number of the state banks in existence at the opening of the Civil War. The note circulation of the national institutions was reported at the close of 1865 as $141,321,903, there being still $78,867,579 of state bank-notes outstanding. The pressing need of a market for bonds was now past; but it was clear that if the second object of the national bank act — the provision of a uniform and secure national currency — was to be attained the function of note-issue must be exercised only by the national banks. If the state banks were to continue upon equal terms with the national banks the result would be merely to add another to the numerous note-issuing systems already existing

before the passage of the national bank act. Some measure which would render the currency more uniform was needed. In order practically to prohibit the use of state bank-notes and thus to stimulate the conversion of state into national banks, Congress, therefore, passed the act of March 3, 1865, by which a tax of 10 per cent. was levied upon all state bank-notes paid out by any bank. This enactment was later made to include the notes of all corporations, individuals, cities, etc., and the tax was further extended to the issuer of the notes as well as to those who should pay them out. This enactment, of course, rendered the use of other than national bank notes impossible, and practically confined the right to issue notes to institutions organized under the national bank act. This and the growth of the national system in popular favor after the close of the War finally gave the new system a free field.

116. Probably the most important provisions of the system as thus inaugurated were those governing the issue of notes. It has just been seen that the issue of circulation was conditioned upon the deposit of United States bonds with the Treasury. Furthermore, the maximum amount of the circulation had been fixed at $300,000,000, and the rigidity and inelasticity inherent in the system had been enormously intensified by the attempt to "apportion" the circulation. Fault had been found, too, with the act of 1864, because it left so much power in the hands of Treasury officials as regarded the apportionment of notes. A more elaborate attempt to regulate the issue of notes was, therefore, made in the act of March 3, 1865.[1]

Every bank having not more than $500,000 capital might receive no more than 90 per cent. of this capital in notes. Banks with capitals less than $1,000,000, but over $500,000 no more than 80 per cent.; those with from one to three millons 75 per cent. and those with over three millions 60 per cent. This was in addition to the former restrictions upon the issue of notes. It will be remembered that, according to the act of 1864, no bank could issue notes to an amount exceeding its capital stock, but each bank must deposit bonds at least to the amount of one-third of its capital.

[1] 13, *Statutes at Large*, p. 498.

Much dissatisfaction was still felt with the apportionment of the circulation. By the end of 1867, the whole of the permitted circulation had been issued and the entire sum was thereafter kept outstanding. The whole of the permitted maximum being thus taken up, no new banks could obtain circulation, and the growth of the system was thereby hampered, since there was no longer any real advantage to be gained by organization under national rather than under state charters.

This state of things continued until 1870. At this date, the withdrawal of the 3 per cent. certificates hitherto held by the banks as a part of their reserves, bade fair to increase the demand for legal-tender notes to be held for this purpose. The act of July 12, 1870, therefore, authorized the issue of an additional \$54,000,000 of national bank notes, and the re-apportionment of the whole issue by the withdrawal of \$25,000,000 from states having more than their proper share. The redistribution of the issues of the national banks, however, was unsatisfactory.[1] Nearly the whole of the additional \$54,000,000 was taken up by the end of 1873, and the Treasury was thus again unable to assign circulation to new banks.[2] The Western and Southern states especially found their circulation inadequate.

[1] The withdrawal of \$25,000,000 had been wholly insufficient. According to the new apportionment based on the wealth and population shown by the census of 1870, the Eastern states were in excess to the amount of 70.6 millions, the Middle states 9.4 millions. The Southern and Southwestern states had 57.2 millions less than their due proportion, the Western 21.4, and the Pacific 7.9. In compliance with the terms of the act, the Comptroller announced his intention of calling upon banks with a circulation in excess of \$1,000,000 to reduce their note issues, and pointed out that owing to the wide distribution of the notes it would probably be impossible for them to call in the notes. They would, therefore, find it to their interest to deposit legal tenders with the Treasurer. It was likely, however, that few if any of the notes would be presented to the Treasury for redemption and it was, therefore, impossible to issue much additional circulation to new banks. The Comptroller consequently recommended the repeal of the act and the authorization of \$25,000,000 additional circulation to be issued to banks in states having less than their due proportion. It was also recommended that banks be permitted to organize without circulation upon depositing United States bonds to the amount of \$10,000 instead of one-third of the capital, and that banks already organized without circulation be allowed to withdraw bonds down to \$10,000.

[2] The act of 1870 contained another important provision. For some time a considerable volume of business had been done on a gold basis. Gold had been received

117. The first really important change in the national banking system after the passage of the original measure was made by the act of June 20, 1874. Although this law was passed after the veto of the so-called inflation bill, it made no concessions to inflation, but rather the reverse. Thus by one of the most important provisions of the act, which dealt with the bond-deposit requirement,[1] banks were authorized to reduce their bond-deposit to $50,000; and if desirous of withdrawing circulation, their bonds might be released upon their leaving with the Comptroller lawful money in sums of not less than $9,000 to cover outstanding circulation. This permission to withdraw circulation by depositing lawful money was an important provision and since the notes could now at least be contracted did something in a negative way toward relieving the inelasticity of the system. The original act of 1864 had provided in Section 16 that circulation might be reduced and bonds withdrawn from deposit beyond one-third the capital stock of any bank "upon its returning to the Comptroller [its] circulating notes." Owing to the difficulty of obtaining their own notes when in circulation banks

by banks as a "special deposit." One-half of all the banks in New York were said in 1870 to have opened gold accounts with customers. Foreign commerce was necessarily carried on upon a gold basis. During the War and thereafter the Pacific states had adhered to a gold basis of payments. This had seriously interfered with the organization of national banks in these states. Resumption of specie payments seemed far in the future. It was thought that the wants of some states might be served, and a certain degree of elasticity for the currency of Western states might be obtained, by authorizing the organization of a new class of banks which should issue notes payable in gold. The act of 1870, in addition to the provisions for redistributing the national bank-notes, consequently provided for the organization of national gold banks which should deposit bonds with the Treasury and receive bank-notes to the amount of 80 per cent. of the value of the bonds. They were obliged to redeem their notes in gold, and for this purpose a coin reserve of 25 per cent. was to be held. They were further to be released from the obligation to receive notes of other national banks. Banks in the Pacific states were not obliged to redeem in the East.

[1] The act of 1874 provided among other things that $55,000,000 (inclusive of the $25,000,000 already mentioned in the act of 1870) were to be withdrawn from states found to have an excess of circulation and redistributed to those whose circulation was deficient.

No bank was to be suffered to issue more than $500,000 in notes, but existing banks might be removed to states with less than their proportion of note circulation. In accordance with the provisions of this act, further arrangements for the withdrawal of circulation were made.

had been unable to reduce their note-issues in this way when desired; because there was no reason why the public should send in notes of such uniform value until they were worn by long use. This, however, was now remedied by the grant of authority to withdraw bonds upon the deposit of lawful money in lieu of the notes outstanding, while the reduction of the required amount of bonds to $50,000 materially lightened for the banks of larger capital the burden of locking up funds in bonds.

118. There had so far been no possibility of elasticity in the bank-currency of the country. As will be seen at a later point, the note-currency had been somewhat contracted in amount, and the events of the crisis of 1873 and the subsequent stringency had led to a demand for an increase in the volume of the currency. Pressure had been brought to bear upon the Secretary of the Treasury to compel the reissue of legal tenders. Under these circumstances, Congress in 1874, before the passage of the bank act of June 20 of that year, passed the so-called inflation bill. The permitted maximum of national bank-notes was at this time $354,000,000. The inflation bill proposed to increase the volume of the legal tenders to $400,000,000, and, in order to bring the national bank-issues up to the same level, additional notes to the amount of $46,000,000 were to be authorized. This bill, however, was vetoed by President Grant. Those who desired to see the volume of the currency increased, were unable to secure the passage of any inflation measure, but, during the following year, what was supposed to be a concession to inflation tendencies was made.

The act of January 14, 1875, which provided for the resumption of specie payments after January 1, 1879, removed both the absolute limitation upon the issue of circulation by banks and the regulations for apportionment and distribution of notes. The Resumption Act, therefore, marks an important epoch in the history of national banks by the establishment of free banking. The maximum issues were thus entirely removed from the control of Congress and a free banking system was established subject only to the oversight of the Comptroller and to the requirements as to bond-deposit.

CHART II

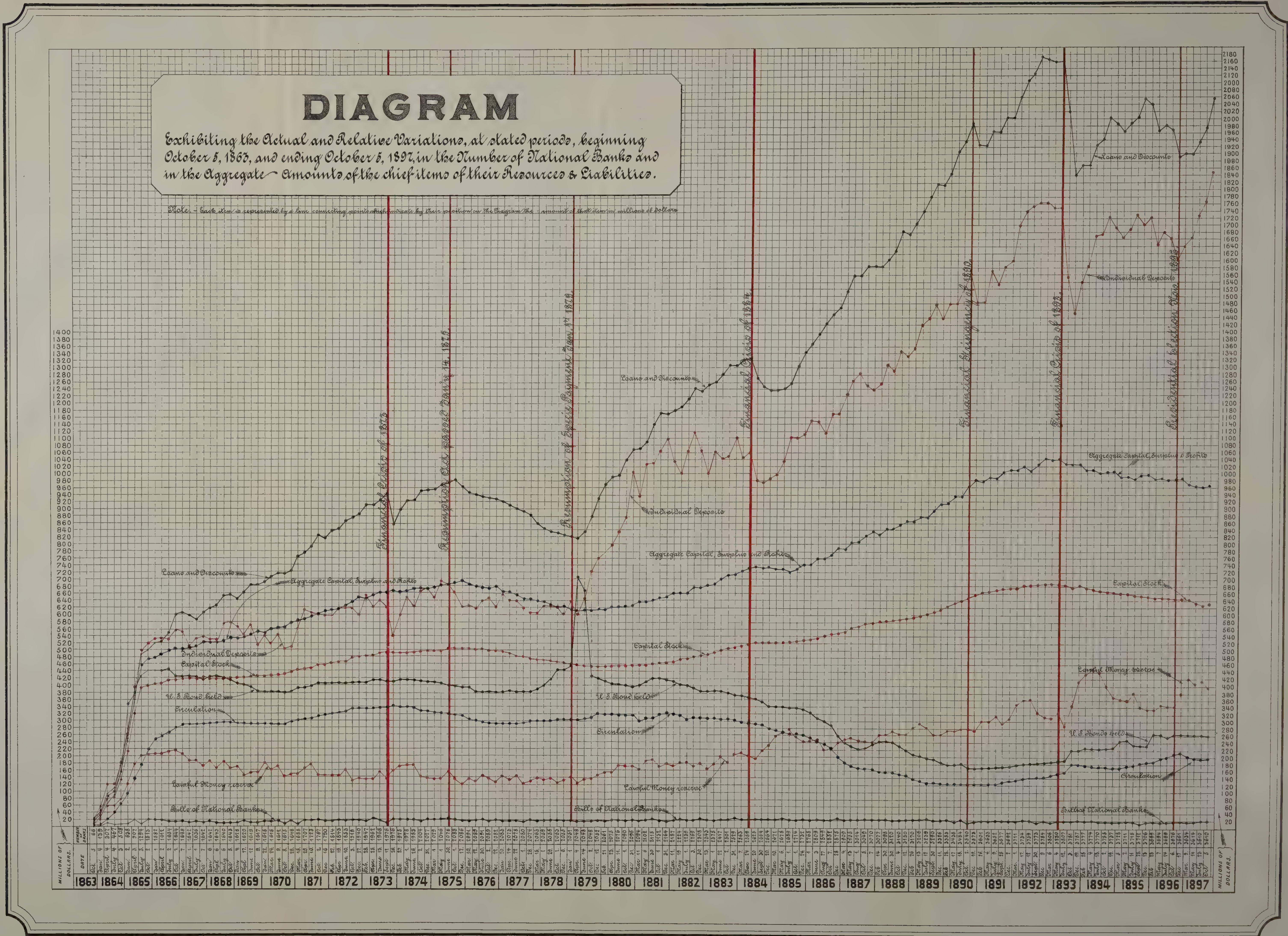


DIAGRAM
Exhibiting the Actual and Relative Variations, at stated periods, beginning October 5, 1863, and ending October 5, 1897, in the Number of National Banks and in the Aggregate Amounts of the chief items of their Resources & Liabilities.
Loans and Discounts
Aggregate Capital, Surplus and Profits
Individual Deposits
Capital Stock
U. S. Bond held
Circulation
Lawful Money reserve
Bills of National Banks
Financial Crisis of 1873
Resumption Act passed Jan. 14, 1875
Resumption of Specie Payment Jan. 1st 1879
Financial Crisis of 1884
Financial Stringency of 1890
Financial Crisis of 1893
Presidential Election 1896
MILLIONS OF DOLLARS.
DATE
1863
1864
1865
1866
1867
1868
1869
1870
1871
1872
1873
1874
1875
1876
1877
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1895
1896
1897

A consideration of some of the earlier experiences of the various states with their free banking systems[1] shows why it was thought that such a step would be a concession to the inflation tendencies. In the past the "free banking" systems had frequently implied an issue of bond-secured notes unrestrained by any redemption requirements or by a maximum limitation with reference to capital. Many of the existing difficulties with the currency, though arising from the circulation of the greenbacks, or other causes, were attributed to the prevailing regulations concerning the issue of national bank-notes. Many no doubt anticipated that the removal of these restrictions would result in a return to the comparatively unrestrained liberty of note-issue which prevailed in certain parts of the country prior to 1860. As many banks could then be established as wished to conform to the general requirements. The removal of the limitation on the note-issues would leave the circulation free to expand, subject only to the general provisions of law requiring the deposit of bonds and limiting these bonds to the amount of the capital stock of the banks. It was further provided that, for every $100 of new national bank-notes issued, $80 of legal tender notes were to be withdrawn and canceled by the Secretary of the Treasury, until the amount of legal tenders outstanding should have been reduced from $382,000,000 to $300,000,000. The Resumption Act evidently anticipated an increase of national bank notes at least to an amount greater than $100,000,000 and, inasmuch as it provided only for the withdrawal of $82,000,000 of legal tenders, was on this ground again a concession to the inflationists.

119. Contrary to these expectations, however, the circulation of the banks did not increase. As may be seen from Chart II and from the tables given in Appendix II the note-issues reached their highest point in 1873. This failure to expand was mainly due to the rise in the price of government bonds which proceeded even more rapidly after the passage of the Resumption Act. In consequence of this rise in price and the consequent impossibility of making an adequate profit from the issue of notes, the

[1] See pp. 297–302.

banks were anxious to withdraw, rather than to increase, circulation. In January 1875, the volume of the national bank-notes was $352,000,000, that of the legal tenders being $382,000,000. The rise in the price of bonds proved so unfavorable to an expansion of the bank-notes, however, that by April 1, 1878 there had been withdrawals of these notes amounting to $74,000,000 leaving the total existing volume of old notes $278,000,000. During the same period there had been issued in new bank-notes $43,000,000 making a grand total of $321,000,000. In accordance with the terms of the Resumption Act an amount of legal tenders equal to 80 per cent. of the $43,000,000 of new national bank-notes or $35,800,000 had been withdrawn. The net result of the operation of the act was thus a contraction of the currency equal to the amount of the $35,800,000 of legal tenders withdrawn plus the difference between the $321,000,000 of national bank-notes and the $352,000,000 originally outstanding—a total contraction of $67,000,000. In this way the provision of the act which authorized a reduction in the volume of the greenbacks corresponding to 80 per cent. of the increase in the national bank-notes, resulted in an entirely unexpected contraction. Consequently, in response to the demands of the inflationists, Congress, in 1878, forbade the further retirement of United States notes, and thus the legislative connection between the amount of the legal tenders and that of the national bank-notes was cut off.

120. There was, however, little probability of an increase in the volume of the bank-notes.[1] So far was this from being the case that there was no expansion of the circulation, while many

[1] "There was a slight tendency to increase bank-note circulation for a time after the revival of business in 1880, but the increase was sharply arrested in the winter of 1881 by the passage of a bill requiring the banks to deposit a new issue of 3 per cent. refunding bonds as security for circulating notes. This limitation on the class of bonds was accompanied by a drastic provision repealing the authority to reduce circulation and withdraw bonds. The banks generally preferred to retain the existing bonds, paying higher rates of interest, even with the loss of circulation, than to submit to such a measure, and 141 banks hastened to deposit $18,764,434 in lawful money for the retirement of their notes and the withdrawal of their bonds in anticipation of the enactment of the bill. The measure was vetoed by President Hayes, but the result upon the secured circulation was to reduce it from $322,654,721 on Febru-

small banks felt the necessity of depositing bonds to the amount of one-third of their capital to be a hardship. Nothing was done to relieve the situation of these banks, until the expiration of the bank charters began to draw near. Many of these ran for twenty years, and began, therefore, to expire about 1883–4. There were certain technical difficulties in the way of reorganizing the old banks and transferring their assets to the new associations which were to succeed them. It was just at this time, too, that the bonds issued during the Civil War began to mature in considerable numbers, laying the Treasury under the obligation of redeeming or of refunding them. The current market rate of interest was now much lower than formerly. Government credit was vastly stronger and resumption was an established fact. It was now within the choice of the government to refund the bonds at a much lower rate of interest. The subject was discussed by the Comptroller in the Report for 1882. He declared that the popular demand for removal of the bond-deposit requirement was dangerous. No nation or state had ever permitted banks to be freely organized without exacting a deposit of securities to maintain the value of circulation. The security of the note-holder was the prime object to be kept in view. The difficulty, nevertheless, was patent. "If the public debt is to be paid hereafter as rapidly as during the past three years," said the Comptroller, "all of the interest-bearing bonds will be surrendered and canceled."

121. In order to make the bond-deposit requirement less burdensome, the act of July 12, 1882, among other provisions, authorized banks having $150,000 or less capital to withdraw bonds down to an amount equal to one-fourth of such capital. Not more than $3,000,000 of notes were, however, to be retired in any one month by the deposit of lawful money therefor. Three per cent. bonds were to be issued in exchange for those bearing 3½ per cent. All of these provisions were favorable to the banks in so far as they were permitted to cease issuing notes

ary 1, 1881, to $305,587,202 on March 1, 1881. Many of the bonds were deposited again after the adjournment of Congress, and the circulation increased to $332,398,-922 on January 1, 1882."—CONANT, *History of Modern Banks of Issue*, pp. 369–370.

at a loss, or at little or no profit. The reorganization of banks which occurred during this period was generally accompanied by a reduction of the bond-deposit, as permitted by the act of 1882, and consequently by a corresponding reduction of circulation. At the same time a considerable number of banks took the opportunity of leaving the system, either by reorganizing under state laws or by going into liquidation in accordance with the provisions of the act.[1] Notwithstanding this tendency there has been a steady, although slow growth in the capital of the system, the increase being about parallel with that of state banking capital. This growth may be traced by reference to Table 23 in Appendix II. At the present time the capital of the banks of the system is about $631,000,000.

122. Among the first of the causes for complaint against the provisions of the act of 1864 was the system of redemption. It was seen from the first that the problem of redemption was a peculiar one. The difficulty lay in the number and diversity of the institutions and the impossibility of demanding universal redemption from all.

The defects of the system were early pointed out. As the act of 1864 stood, it provided for redemption only over the counter of the issuing bank and in some one of seventeen specified cities, while the banks in these cities were required to redeem in New York. During 1864–1865 there were many proposals to require redemption only at some one central point, preferably New York.[2] Others favored the requirement of redemption at Boston, Philadelphia, and New York. A year later the Comp-

[1] The decline of the note-circulation of the national banks, and the fact that little profit is derivable if the banks are obliged to use the note-issue, has stripped the national banking system of one of its principal advantages over other systems. Burdened as the national banks are by the bond-deposit requirement, and by various other restrictions, it has latterly seemed more advantageous to take out charters under state laws which would grant greater freedom in the conduct of business. Thus, the so-called trust companies are able to perform a variety of functions which the national banks do not possess, and have competed keenly in the principal cities with institutions organized under the national act. In the less important country places small state banks, though practically denied the privilege of note-issue, seem to have a considerable advantage over the national banks.

[2] *Cf. Commercial and Financial Chronicle,* September 23, 1865, p. 394.

troller reported that action on the redemption question was imperatively demanded. Of the 1647 banks 1320 were already voluntarily redeeming in New York, Boston, or Philadelphia. The argument for requiring redemption in one of these three cities was just as valid for redemption at one central point—New York. In 1867, the Comptroller again urged the necessity of a suitable redemption system. He pointed out that ultimate redemption was secured by the bond-deposit. It was only convertibility that was absent, and this could be secured by a comprehensive system of redemptions. "At present," said he, "there is no immediate demand for the redemption of national bank-notes, but it would be one of the healthiest evidences of returning soundness if it shculd be inaugurated. It would be the first step toward specie payments to see a bank-note accepted and treated as a promise to pay, and not the payment itself."[1] It was noteworthy that redemption at New York was no longer advocated. This was probably in deference to the popular fear that such a system would render the country banks tributary to New York. The latter objection was discussed a year later, and the Comptroller suggested the organization of one central bank of redemption in New York by the national banks as stockholders. He renewed the recommendation in 1869, but nothing was done, nor did he again discuss the subject until 1874. Nevertheless, the demand for action on the redemption question continued. It was said that there were networks of banks which, by various maneuvers, managed to avoid redemption.[2] Various hostile projects were brought up in Congress. No legislation on the subject, however, was passed until the act of June 20, 1874.[3]

123. Up to the passage of this act there had been, as already seen, no real redemption. The act of 1874 provided that no cash need be kept in the vaults of the banks as a reserve against circulation. National banks were, however, to be compelled to keep on deposit with the Treasurer of the United States at Washington a fund of 5 per cent. of their outstanding circulation.

[1] *Finance Report*, 1867, p. 5.

[2] *Cf. Hunt's Merchants' Magazine*, June 1870, p. 403.

[3] 18, *Statutes at Large*, p. 123; see Appendix I.

This fund was to be kept in lawful money, *i. e.*, greenbacks, and was to be used by the Treasurer for the redemption of all national bank-notes presented.

At the present time, notes must still be redeemed on demand in lawful money by the banks issuing them, as well as by the Treasury. Should any bank fail to redeem its notes on demand, the Comptroller is authorized to sell its deposited bonds and redeem the notes with the proceeds. In case the proceeds of the bonds should be deficient, the United States has a paramount lien upon the general assets of the bank. Gains arising from loss or destruction of notes inure to the benefit of the United States. The goodness of the notes is further maintained through their reception by the United States in payment of all dues (except customs) to it. They are not legal tender in payment of "all debts, public and private," but must be accepted by national banks in payment of dues from other banks, and are payable by the United States in satisfaction of all claims within the United States, except interest on the public debt.

The working of the redemption system thus inaugurated, and which has continued in operation down to the present time, may be seen by reference to Table 29 in Appendix II, which exhibits the monthly redemptions of national bank-notes since the establishment of the agency in Washington. From this it appears that the total volume of notes is on the average redeemed about once in two years. This is of course scarcely enough to retire worn and mutilated notes. Much less does it provide any real redemption or elasticity. There has, in fact, been neither motive nor ability on the part of the banks to insist upon actual redemption. The provisions for bond-deposit, which have made the issue of notes unprofitable wherever interest is high, and unprofitable in any case except where practically the whole circulation can be kept permanently outstanding, have induced the banks to take out only so much circulation as they can keep outstanding throughout the entire year. There has thus been no chance for the substitution by bankers of their own notes in place of those of others, as in Canada, and hence no real redemption has been possible.

124. According to the terms of the act of 1864 all banks, except those in seventeen specified cities,[1] were to keep "on hand in lawful money" at least 15 per cent. of the aggregate amount of their notes and deposits. Three-fifths of this "lawful money" might, however, consist of balances due from banks located in the seventeen cities before mentioned. Banks in these cities were required to hold, in lawful money, 25 per cent. of the amount of their notes and deposits, but might re-deposit one-half of these reserves in banks in New York.

From the outset, the reserve system was a source of many difficulties. The requirement of a fixed reserve, which should be "at all times on hand," and the contradictory permission to deposit three-fifths of this reserve with banks in cities other than those where the depositing bank was located, combined with the inelastic and redundant character of the currency and the defective provisions for redemption to stimulate speculative transactions at the expense of ordinary business.

The framers of the national bank act had decreed the keeping of what was considered a large reserve, and wished only to make the sacrifice involved as little onerous as possible. Actually, the reserve system afforded just the outlet desired for redundant currency at dull seasons. Country banks, however, would feel no inducement to deposit their currency with other banks, unless they received some compensation. Thus the custom of paying interest upon deposits arose. It was necessary for city banks to find employment for sums thus deposited with them by other banks. This could only be done during the dull season when the country deposits were at their height, by stimulating borrowers through the offer of unusually low interest. And, inasmuch as the deposits were always subject to demand, they could similarly be loaned only on call. It being seldom that large sums of money can be used in legitimate business operations subject to call, the outcome of the practice was a stimulation of loans to the stock market and of speculative dealings of all sorts.

There can be no doubt that the original intention of the law in permitting the depositing of reserves with other banks in

[1] Reduced to sixteen by act of March 1, 1872.

principal cities had been merely to make provision for counting in the statement of required reserve the funds deposited as a basis for exchange. This would have been open to no objection. But the offer of interest for deposits made by certain city banks with the object of attracting to themselves the deposits of country banks stimulated the country banks to keep the legal maximum constantly on deposit with their city agents.

125. This concentration of resources at New York was one of the first subjects to create anxiety. The difficulties arising from the massing of funds in New York were popularly attributed to the requirement of a fixed reserve. An agitation for the repeal of all provisions of law demanding a reserve was begun, but was not strong enough to effect anything. In speaking of this the Comptroller pointed out, in 1872, that it was not the strong and wealthy, but the poor and weak, banks which were making the demand for a change in reserve requirements. The contention that the directors and managers of a bank were the best judges of its needs in respect to reserves, was no argument against reserve requirements, if those requirements were lower than what the judgment of the most skillful men dictated as a proper reserve for permanent keeping. "If private citizens," said the Comptroller, "wish to transact business in accordance with their own judgment, they can avail themselves of the privilege by conducting a private business."[1] That the reserve requirements were not extreme, was shown by the fact that but 6 per cent. of the liabilities of country banks, and but 12½ per cent. of those of reserve-city banks, must be kept at home in cash. As a rule, about as large a reserve was held by the best state banks as by those organized under national charters.

The defects of the reserve system were strongly called to the attention of the people in connection with the crisis of 1873. During the last two months of 1872 the money market was extremely close, but the year 1873 opened with hopes for a relaxation of the stringency. These, however, were not satisfied. Call loans, which had been at 7 per cent., fell only tem-

[1] *Finance Report*, 1873, p. 81.

porarily and rose again to a point higher than before. Nearly every branch of business was affected by the stringency. For some time there had been an active demand on the part of country banks for their deposits with New York banks. During the two years preceding 1873, the periodic stringencies due to seasonal demands by country banks, had been more than usually intense and the fear of more than ordinary difficulty in obtaining money had become tolerably widespread. Added to this, the organization of new banks in Western and Southern states, and the announcement by the Comptroller in a letter to the national banks that he should soon be obliged to call upon the larger banks to reduce their circulation, aroused fears of a scarcity of currency.[1] During the few weeks prior to April 1 the demand of the country banks for their deposits with New York banks had been about double what it had been in ordinary years, and during the period subsequent to that date currency was not returned as freely as usual.

126. The crisis of 1873 really began with the failure of the Warehouse Security Co., New York, on September 8, and of two other large institutions followed by the failure of Messrs. Jay Cooke & Co. and Messrs. Fisk & Hatch in quick succession on the 18th and 19th. These failures were closely connected with the depression in railway securities resulting primarily from the over-investment of capital in railway extension, but partly due to the Granger movement and the popular feeling against railroads. On the 20th the New York Stock Exchange closed its doors. The demand from country correspondents became more active, and their drafts came in to such an extent that reserves were much reduced. Call loans to city borrowers could not be realized upon, because the means of borrowers, being practically exhausted, were already pledged to the banks, and even if they could have paid they would have done so in checks on the associated banks, which would not have enlarged the stock of cash on hand. The closing of the Stock Exchange was decisive. Immediately after this event, the banks of New York decided at a meeting to make their legal tender notes a common stock, and

[1] See *Commercial and Financial Chronicle*, 1873, vol. xvi, pp. 373, 374.

to issue clearing-house certificates.[1] This was followed by a suspension of currency payments. Exchange on New York was at a discount and unavailable, instead of being at a premium as it should have been. The other national banks, therefore, being unable to withdraw their deposits from New York, suspended currency payments, and the suspension continued for forty days.

127. Recovery, after the crisis of 1873, was rapid so far as concerned the reëstablisment of the bank reserves. By December 31, 1873, the specie stock of the banks had risen to $2,286,734, and their stock of legal tenders to $45,904,389, while circulation and deposits were but $486,180,869, showing a notable falling off in the latter item. The events of the crisis, however, made a strong impression upon the public mind. The report of the committee of the clearing-house had especially advocated the cessation of interest payments for deposits and the keeping of fixed reserves. It was generally felt that reforms should be effected upon these two points. One of the earlier drafts of the act of 1874, establishing the redemption fund at Washington, contained a provision intended to meet both points. Banks were to be required to keep their lawful money reserves in their own vaults at the place where their business was ordinarily carried on. The bill containing this provision passed the Senate, but was lost in the House, and went to a conference committee which reported it back with this provision omitted. Although the bill abolished the redemption agencies in the sixteen specified cities so that the keeping of funds in New York and other places was no longer necessary except for purposes of exchange-

[1] According to the resolution adopted by the New York Clearing House Association, September 20, 1873, as a measure for the relief of the New York banks, "any bank in the Clearing House Association [might] at its option, deposit with a committee of five persons to be appointed for that purpose an amount of its bills receivable, or other securities to be approved by said committee who shall be authorized to issue therefor to said depositing bank certificates of deposit, bearing interest at 7 per cent. per annum, in denominations of five and ten thousand dollars, such as may be desired, to an amount not in excess of 75 per cent. of the securities or bills receivable so deposited." It was also resolved that the legal tender notes then held by the banks were to be treated as a common fund for mutual protection. The committee before referred to was to have power to equalize the notes by assessment or otherwise at discretion.

it still permitted the counting of such funds as reserve. Thus the only important outcome of the demand for changes in the reserve requirements was the provision of the act of June 20, 1874, already noted, by which the requirement of a reserve against notes was abolished and the 5 per cent. redemption fund was ordered to be kept with the Treasurer in Washington. The other provisions regarding reserves were maintained.

128. As already mentioned, the Resumption Act of 1875 provided for the redemption of the legal tenders in gold after January 1st, 1879. Since many of the greenbacks were held in the reserves of the banks, it was highly important that the banks should coöperate with the Treasury in maintaining its gold stock. Inasmuch, however, as the bank notes continued to be redeemable in greenbacks there was no reason why the banks should throw any additional strain upon the Treasury. It was, in fact, entirely consonant with the interest and desire of the banks to make resumption as easy for the government as possible. Resumption, was effected without difficulty. Few legal tenders were presented for redemption and of these probably none came from the banks. Greenbacks being thereafter at par in gold there was no longer any impediment to a coin circulation and the coin reserves of the banks consequently increased rapidly.

Since the decrease in note circulation previously mentioned has become marked and permanent, and the elasticity of the system has consequently decreased, the reserves of the banks have been subject to strains more severe than formerly. The impossibility of issuing notes to meet mere currency needs in time of stringency has again and again led to heavy withdrawals of current funds from the depository banks, necessitating resort to expedients of various sorts for mutual support. Thus, although the banks have in general held reserves much in excess of the legal minimum,[1] the precautionary large reserve has been rendered of no avail in time of unusual demand for currency. In this way reserves have several times fallen much below the

[1] It may be noted that the distrust of the country banks which seems to exist in some minds hardly seems warranted by the figures for reserve actually held. These seem to show that the country banks have ordinarily held, proportionately to the reserve required, much more cash on hand than have the banks in reserve cities.

legal minimum in the financial centers. The problem of the maintenance of an adequate reserve has thus become somewhat dependent on that of securing an elastic currency. Since the passage of the bank act of 1882, moreover, several causes beside the inelasticity of the note currency have been at work to make conditions more difficult. These now remain to be discussed.

129. Notwithstanding the decrease of national bank circulation after 1882 the general stock of currency did not decrease. The issue of silver certificates under the act of 1878 more than compensated for the tendencies to decrease in other directions. The currency was thus kept redundant, and this redundancy had much to do with the strong export movement of gold during 1882. This movement was less intense during 1883, but increased to an alarming degree during the early months of 1884.

This export movement tended to deplete the coin reserves of the New York banks. While the banks, during the period prior to the crisis of 1873, had been in a position notably weaker than when the crash actually came, so during 1883 the banks were much less rich in specie than during the early portion of 1884. But it was precisely the generally excited condition of the market, of which weakened bank reserves were a symptom, which finally brought on a disaster. The general over-trading had resulted in many failures during 1883 and the feeling of anxiety thereby induced, aggravated by the dread of legislation which might lead to the introduction of a silver standard, led ultimately to several bank suspensions in New York which, as was to be expected, were followed by a severe drain of country deposits. May 1, 1884, the total coin holdings of the New York banks were but $9,900,000, as against a usual holding of from $15,000,000 to $26,000,000. General suspension was imminent. The result, as in 1873, led to combined action on the part of the New York banks. On May 14, at a meeting of the members of the New York Clearing-House Association the issue of clearing-house certificates was again decided upon. This action resulted only in a mitigation of excitement. The city deposits of the country banks continued for some time to be heavily drawn upon

and for a time the reserves of the banks were reduced considerably below the legal level.

130. The reduction of bank circulation went on. The bank-note issues decreased with greater rapidity during the few years immediately succeeding the act of 1882 than at any time before or since. This has already been mentioned and may be seen from the chart given on a preceding page. Various bills intended to remedy the defects of the system of note-issue were introduced into Congress, but none was passed. A bill introduced by Senator Sherman in 1887 providing for the repeal of the provisions of law requiring a bond-deposit in excess of $1000, and for the extension of the permitted note-issue to the par value of all bonds deposited, like all others, failed of passage.

The whole subject, however, began to attract attention more intensely in 1890. For some time there had been a general tendency to speculate. Heavy investments in railways and other forms of fixed capital had necessitated the placing of large volumes of securities. These had overloaded the market, and the result was a severe stringency, made more intense by the news of serious failures in London and the danger of large withdrawals of capital from America in consequence of the timidity of foreign investors.

All of these causes united to bring on conditions much the same as those which preceded the panic of 1884. During the first eight months of 1890, gold exports were exceedingly heavy amounting to more than $75,000,000, net. Assistance from Europe and especially from England, which was itself upon the eve of a serious crisis, was not to be looked for. During the early autumn, demands on New York City banks from country correspondents became unusually pressing. Deposits had already fallen off in the spring months, dropping nearly $45,000,000 between February 28 and May 17. This demand continued active during the fall, and, though the banks were able to strengthen their position, the crisis could only be postponed. It was forced on by the news of the failure of Baring Bros. of London, and became very serious early in November. On the 11th of that month the situation was so grave that a meeting of

the clearing-house banks of New York decided upon the issue of clearing-house loan certificates. These were put out to the extent of $16,645,000, and the example of the New York Clearing-House was followed by those of Philadelphia and Boston soon afterward. These clearing-houses issued certificates to the amounts of $9,655,000 and $5,065,000 respectively. None of the certificates were outstanding after May 1891; but during the whole period the bank circulation continued practically inelastic.

131. In the meantime, forces had been at work bearing directly only upon other parts of the general monetary system, but ultimately influencing the national banks. The acts of February 28, 1878, and July 14, 1890, had led to the coinage of large quantities of silver dollars and the issue of Treasury notes. These acts, aided by the willingness of the government to furnish free transportation for silver dollars, had to some extent assisted in narrowing the scope of the national bank-note and contributed to reduce the volume of this paper in circulation. This, however, was the least important effect of the two acts. These measures, by destroying confidence and stimulating fears of a silver standard, together with the redundancy of the silver and government paper, created unrest, drove gold out of the country, threw all demands back upon the slender gold stock of the Treasury, brought on the panic of 1890 and its successors in 1893 and 1896,—and weakened the position of the national banks, not merely by a destruction of confidence, but by a direct effect upon their reserves.

132. Recovery from the crisis of 1890 early in 1891 was merely apparent. The causes which had operated to disturb the commercial equilibrium in 1890 were still in operation and, in conjunction with other unfortunate circumstances, intensified what would in any event have been bad into the worst monetary and banking crisis the country has ever seen. The gold exports and withdrawals from the Treasury, which continued from the moment the Sherman law was passed, were largely due to the fears of foreign investors. Crops, indeed, were good in 1892, and momentarily turned the course of foreign trade, but this relief was short-lived. The over-investment in fixed

capital which continued during 1892 aggravated the situation, and 1893 opened with every probability of a terrible monetary crisis. Heavy failures began almost with the new year, and by the middle of May the panic was in full swing, proving to be far the most disastrous period in the history of the national banking system. More national banks suspended in June than in any previous year, and three times as many in July as in June. Private and state banks and corporations collapsed in immense numbers. As usual, the issue of clearing-house certificates was resorted to, and that on a scale much greater than in previous years. The device was also much more widely used than previously. Philadelphia began the issue of certificates, the first making its appearance on June 16. New York and Boston resorted to the same expedient on June 21 and 27 respectively, then Baltimore, followed by Pittsburg. For the aggregate of these cities the largest amount outstanding at any one time was $63,200,000. Few were outstanding, however, on October 31. Efficient as were the clearing-house certificates of the associated banks as far as they went, no adequate assistance was furnished by the notes of the national banking system. True, the violence of the crisis forced the system to do its utmost for the relief of the business community but, in such a test, it displayed its inefficiency.

That nothing except the most strenuous demand for money or currency can bring about an increase in the national bank-note issues, and then only in a very inadequate and halting way may be seen from a study of the crisis of 1893, and the currency scarcity resulting from it. The total increase of national bank-currency during the unprecedented stringency in the fall of 1893 was only about 15 per cent., which was less than half the amount of money supplied through purchase of European gold by individual bankers in the single month of August. On June 1, 1893, the total volume of national bank-notes outstanding, including those in the United States Treasury and subtreasuries amounted in round numbers to $177,000,000. The intense stringency during the succeeding weeks and months threw such a burden upon the existing sup-

ply of money — already strained to its utmost — that the slight expansion in the note-issues of the national banks was utterly inadequate to meet the increased demand. This led to the adoption of various substitutes for currency and money. The clearing-house certificates, already mentioned, were issued to the amount of over $41,000,000 in New York, $22,500,000 in Philadelphia and Boston, and $5,000,000 in the aggregate in several other cities. These expedients, however, were only employed in financial centers. In the Western and Southern states it was necessary to resort to an immense number of contrivances to supply the wanting circulating medium. Not only did many holders of United States bonds of large denominations have them exchanged for lower denominations and use these small bonds as currency, but considerable sums of certified checks were issued to circulate as money. In many places resort was had to checks payable only through clearing-houses, and many large corporations issued checks of small denominations upon the strength of their individual credit. Many printed checks drawn on New York and used as local currency were issued by certain railways, and even so-called bond certificates, representing securities deposited in trust, as well as bonds of very low denominations issued by certain cities, were used in meeting payrolls, and in turn by employés in purchasing ordinary necessities. Besides these, there came into existence an immense number of orders and certificates of various sorts which served as currency in sections where real money or money substitutes were scarce or wholly wanting. During the whole period, as already stated, the increase in national bank circulation was phenomenally slight. True, it did increase from $177,000,000 already said to have been outstanding on June first, to about $199,000,000 on September first, and about $209,000,000 on the first of November. Only the very strongest stimulus was able to increase it in the slightest. Even then, it did not arrive until after the need was past, for many packages of currency were returned unopened by banks which had sent for them during the scarcity.

The period since the crisis of 1893, has not been a prosperous one for the national banks. Failures have been numerous

and business conditions unfavorable. There has been a noticeable diminution of capital since 1890. Circulation has, on the contrary, increased slightly, owing to the lower prices of United States bonds. Deposits, which fell off during 1893 with a rapidity and to an extent not before known, recovered rapidly but continued upon a lower level than formerly.

CIRCULATION SECURED BY BONDS.

133. Whatever impedes the ability of a bank to furnish its currency, whether this currency take the form of notes or of deposits, must necessarily hinder it in the performance of its legitimate functions. As will be seen later[1] the assessment of a tax upon the currency of a bank will increase the cost to the bank of furnishing its loans to the community. That is to say, so far as it results in a rise in the rate of interest, it means that the tax has been shifted by the bank to the borrower. From the side of the borrower it is clear that anything which interferes with the ability of the bank to make him a loan and thus raises the rate of discount is injurious to him. It is clear, then, that in the interest of the whole community the issue of bank currency should be as unrestricted as is consistent with safety.

In the United States the choice at present is supposed to lie between a bond-secured issue (bonds or securities of some sort being pledged for the redemption of the circulation) and a system in which the notes, like the deposits, are secured only by the general assets of the bank. Before considering, however, the bond-secured type of circulation as such, one point having special application to the banking system of the United States must be considered. The bonds at present required as security for circulation are national bonds. The people of the United States have become accustomed to the security of bank notes based upon the deposit with the government of national bonds. For thirty-five years this has furnished an absolutely safe bank circulation. There is good reason why the people should have come to regard this system as highly satisfactory, and why there should be a strong belief that no other kind of security would be acceptable.

It is well understood, however, to be the traditional policy of the United States to pay off its bonded indebtedness. Since the

[1] In Section 242.

close of the Civil War the reduction of the debt has gone on in a way to surprise the debt-burdened countries of Europe. Two-thirds of the debt existing in 1865 has been paid off and the amount of bonds now available for national bank circulation is not large. If we should return to the policy of the past and begin the payment of our national debt again, it is evident that United States bonds could not be used to provide a permanent and increasing bank circulation. Certainly, we may not seriously discuss the possibility that a debt of the United States would be purposely contracted or maintained merely in order that bonds might be provided with which to secure the notes of national banks.

Even if sufficient amounts of United States bonds were provided in the future, or if other kinds of bonds were deemed satisfactory, there would still be serious objections to the plan of a circulation secured by bonds.

First, any provision which obstructs the easy flow of loans from banks to customers in the particular form in which they wish to take their loans is a burden to the community. It works in much the same way as an increased cost of agricultural implements to farmers, who can accomplish results only at an increased cost, whether their tools cost them more, or whether their loans cost them more. Any means by which the notes are less obstructed, will facilitate loans, and better serve the community which is dependent on notes.

134. To communities where the supply of loanable capital is inadequate to the demands and where the rate of interest is correspondingly high, the system of bond-security as a basis for note-issue is especially disadvantageous for another reason. It deprives that community of a large amount of capital which it would otherwise have, in that it requires the banks in that community to loan elsewhere at a low rate of interest (in the form of investments in bonds) large amounts which would otherwise be loaned to borrowers in the community in question. An illustration may make this clearer. The present capital of the national banks of Nebraska, Kansas, Alabama, and Texas is about $45,000,000; the deposits in those states are, roughly,

$75,000,000. If the banks of these states were to issue notes under the present system to the amount of $36,000,000 (80 per cent. of their capital) their accounts would stand somewhat as follows:

CIRCULATION BASED ON PRESENT BOND REQUIREMENT.

Resources.		Liabilities.	
Loans to community ...	$81,200,000	Capital	$45,000,000
United States bonds[1]...	46,800,000	Surplus and undivided profits	12,000,000
Reserve (cash and on deposit)............	40,000,000	Circulating notes	36,000,000
		Deposits	75,000,000
	$168,000,000		$168,000,000

If, however, the banks were not required to invest in bonds, they could loan to local borrowers not only the $81,200,000 possible under the present law, but also the $46,800,000 now required to be invested in bonds—leaving the account standing as follows:

CIRCULATION BASED ON COMMERCIAL ASSETS.

Resources.		Liabilities.	
Loans to community...	$128,000,000[2]	Capital	$45,000,000
Reserve (cash and on deposit)	40,000,000	Surplus and undivided profits	12,000,000
		Circulating notes	36,000,000
		Deposits	75,000,000
	$168,000,000		$168,000,000

This of itself would be objection enough to the system from the standpoint of our Western and Southern states; but when to this hardship that capital is taken away from their local borrowers and invested elsewhere in bonds is added the further disability which has been mentioned—that this outside investment must be at an exceedingly low rate of interest—it seems inexplicable that the system should have been permitted to

[1] $20,000,000 4's of 1907 at 110, and $20,000,000 4's of 1925 at 124.

[2] The sum of the loans and the cost of the bonds under the bond-deposit requirement.

exist as long as it has. It needs no argument to show that if one condition precedent to the establishment of a bank of issue in such a locality, is that a greater or less amount of capital shall be loaned elsewhere at a rate of interest much lower than the local rate, the loss thus incurred will necessarily be made up by a higher rate of interest upon the capital which remains to be loaned at home.

135. A system of bond-deposit security will be a rigid system. It cannot respond to sudden needs. The relation of the price of bonds to the market rate of interest produces great difficulties in regard to the probable issue of bank-note circulation when it is needed.

It is well understood that changes may take place in the value of bonds due to changes in the credit of the government or to changes in the normal rate of interest, entirely outside of the control of the banks. As elsewhere shown, the profit of a bank on its circulation is diminished as the price of the deposited bonds increases, that is to say, as the rate of interest received on the bonds falls below the commercial rate. For this reason changes in the price of bonds may have a direct bearing upon the profit of circulation, and hence upon the volume of the notes which the banks will thereby keep outstanding. It may, therefore, be laid down as an undisputed fact that a system of bond-secured circulation is practically inconsistent with the automatic adjustment of the quantity of notes to the demands of borrowers and the needs of trade. When the demand for loans is great, there is little profit to be made in putting out notes; that is, when the demand is urgent, the supply is not forthcoming.

Also, an increase in the commercial rate of interest will lessen the relative profitableness of issuing notes, secured by bonds paying a low and fixed rate of interest. At any given time, with bonds at a definite price, the existing system makes the issue of notes profitable in those sections like New England, for example, where there is already an abundance of both currency and capital, accompanied by low rates of interest, and unprofitable in those sections such as the West and South, where rates of inter-

est are high and a real demand for more currency and capital exists.[1]

As already explained, the bonds are high-priced and bear a low rate of interest; and yet, in times of financial stringency, the rate of discount is sure to be high, and borrowers are in great need of loans. As against buying bonds bearing a low rate of interest in order to issue notes, there is the opportunity of loaning such funds directly at the high market rate of discount. The situation, therefore, puts a premium upon the direct use of banking capital, as against the method of investment which leads to increasing the bank-note circulation. In those communities where bank-notes are essential to making discounts this is a serious obstacle. In short, at the time or place of pressing demand under the existing system, the supply of notes is not forthcoming.

On the other hand, if the country is suffering from business depression, if funds are accumulating in the banks, and if the market rate of interest is low because there are few opportunities of profitably employing capital, then it would not be impossible to expect the banks to use superabundant funds in buying bonds of a low rate of interest. Therefore, at a time when the demand for loans is slight and the rate of discount low, it would be easy for the banks to invest in bonds and thereby obtain notes. In short, when there is no demand, the supply is easily obtained. It needs no further comment, consequently, to see that such a system of note-issues works at cross purposes with the needs of the public. With a deposit of bonds for security of notes, there is no supply of notes at a time when most needed and an abundant supply of notes when least needed.[2]

[1] It appears for example, that, in the New England States, where the commercial rate of discount is not over 5 or 6 per cent., the national banks find it profitable to issue in excess of the notes on the required deposit of bonds, more than half the amount which they might so issue; while in the Western and Southern states, the banks issue, in general, but little more than the amount of notes permitted upon their required deposit of bonds. See pp. 190–192.

[2] This has been clearly illustrated by the experience of the last half dozen years. "From 1882 until 1889 there was a pretty steady advance in the price of government bonds; the 4's of 1907 having risen from 103 in 1880 to 129 in 1889. In 1880 and 1881, while these bonds were selling between 103 and 112, there was some

136. It should be noted that when the necessities of business urgently demand additional notes, even if the price of bonds should be such as to make the issue profitable, the delays incident to the purchase of bonds, the taking out of circulation upon them, etc.,would make it impossible to obtain the currency until all need for it was practically past. Under such a system, therefore, banks must refuse to customers additional supplies of notes upon sudden demand even though the community in such circumstances has enlarged its currency need and an additional supply may, therefore, without additional strain on the bank, be kept in circulation. Under such circumstances, if notes are an essential to the borrower, rates for loans rise abnormally and crisis conditions are vastly intensified. Probably the best illus-

increase in the national bank circulation; but their price touched 120 in 1882, and for nine years thereafter, the bonds being high priced, there was a steady decrease in the note circulation of the national banks. The financial panic of 1890 caused a fall in the prices of government bonds, and thereby increased the chances of profit on the circulation of national bank notes. As a result there was a net increase of $13,000,000 in their circulation in 1891, and of $8,000,000 in 1892. Now, in these two years, there was absolutely no demand for an increase in the circulating medium of this country; on the contrary, the Treasury Department in these years was injecting arbitrarily between $25,000,000 and $50,000,000 of silver paper money into the currency of the country, as a result of the Silver Purchase Act of 1890, and gold, in consequence, was being exported at a rate which alarmed business men and finally precipitated the panic of 1893.

"During 1893 the 4's of 1907 sold down to 113, and the banks added to their circulation $37,000,000. During the months of June, July, and August of that year there was a most urgent need for an expansion of the currency; but during these months the new national bank notes did not appear. Not until after the panic was over and money was piling up in all the financial centers — a drug on the market — did the increase in the national bank note circulation take place. As a result of the panic, business being depressed, the interest rate on prime commercial paper during 1894, 1895 and 1896 was between 3 per cent. and 4 per cent. The money supply of the country was in excess of its needs and gold was exported in large amounts. The Treasury, embarrassed by the withdrawals of gold, was forced to issue bonds in order to maintain the gold reserve. These bond issues forced down the prices of bonds, and thus increased the profit which banks could make upon new circulation. Therefore, considerable idle banking capital, which could be loaned barely at 3 per cent. in business, was exchanged for government bonds and made the basis for bank notes, so that in 1895 and 1896 there was a net addition to the bank note circulation of $32,000,000. Thus, the national bank note helped to embarrass the government by inflating the currency at a time when the government was doing its utmost to hinder inflation and prevent the exportation of gold to Europe."—PROFESSOR JOSEPH FRENCH JOHNSON, *in response to the interrogatories of the Monetary Commission.*

tration of this delay in responding to demand was seen in the difficulty of obtaining currency during the summer of 1893, when it was practically impossible to secure a sufficient supply of a circulating medium of any sort. The New York banks held on June 1, 1893, a surplus of $21,000,000 in excess of their legal reserve. At that time the volume of national bank notes outstanding was about $177,000,000. By the first of August extraordinary demands for currency had drawn down the reserves $14,000,000 below the legal minimum and yet the outstanding notes were only about $5,000,000 more than June 1. By September 1, however, when the reserves were but $1,500,000 below the minimum, and the urgency was past and currency once more comparatively abundant, the notes had begun to expand and had already reached $199,800,000, subsequently rising to $209,300,000 on November 1, notwithstanding the continued decrease in the demand for them.

These considerations may be stated in three indictments of the system (1) higher regular rates of interest; (2) inelasticity; (3) inconvenience and delay.

The explanations here briefly given sufficiently account also for the extraordinary fact in the history of the national banking system that from December 1873, when the note circulation stood at $341,320,256, it pretty steadily diminished to October 1890, when the amount outstanding was but $122,928,084. That is, in the face of a special stress, the bank-note circulation proved its maladjustment to the needs of the public by shrinking at the time when there was more work to be done.

CIRCULATION SECURED BY COMMERCIAL ASSETS.

137. None of the objections previously noted are, of course, applicable to notes issued on the security of general commercial assets. It has been fully shown that a bond-secured circulation cannot furnish an elastic medium, expanding and contracting automatically. But it is quite otherwise with a currency which is based upon the general assets of the issuing banks. The volume of notes put forth under such circumstances will, like deposits, automatically expand in volume by being issued upon demand from legitimate borrowers, and automatically contract by being returned to the bank when the need for the currency is past. Under such a system, any increase in the demand for money, and consequent higher rate of interest, adds to the inducement to issue notes, instead of making it less profitable as in the case of bond-secured currency.

There is, moreover, no delay or inconvenience such as exists where bonds must be purchased and deposited with the Treasurer before the notes can be issued. The assets on which the notes are based are the ordinary commercial paper acquired by the bank in the course of its regular business. The bank is thus always ready to increase its circulation if the public will use more notes, and all considerations of profit lead it to do so, as its power to loan will be increased in proportion as it is able to keep more notes in circulation. The same motives acting on all the banks lead to active competition, which, as explained elsewhere, results in the prompt redemption of all notes deposited or paid into any bank.

The greater comparative elasticity of a system of bank currency based on general assets over one based on deposit of bonds, is shown not merely by a comparison of the national bank system with foreign systems based on general assets, but even more sharply by an examination of the results of the two systems when existing side by side in New York, prior to 1860.

In that state the so-called "Safety Fund Banks" were free to issue notes upon their general commercial assets; while the "free banks" were obliged to deposit with state officials either United States or state bonds, or bonds and mortgages. Because the rate of interest which these investments bore was not very much less than the commercial rate, the inelasticity of the bond-secured currency in New York was not as great as that of the national banking system. Yet, as compared with the circulation issued by the safety fund banks upon commercial assets, it was so rigid as to make its inferiority in this regard perfectly manifest.[1]

Another result of a system of bank currency based on general assets—indeed a corollary of what has just been stated—is that each community is thereby enabled to furnish for itself most easily and economically just such a currency as it requires for the convenient transaction of its business. The rural districts are not forced to go to more expense in creating their currency—notes—than are the commercial centers in creating that which they use—deposits.

Then, again, where commercial paper is accepted as the basis for the notes, the banks are not obliged to withdraw from the community for investment in bonds a large portion of their funds. The local borrowers thus get the benefit of having offered to them the capital which a bond-secured system requires to be invested in bonds. For sections where notes, as distinguished from deposits, constitute the important part of the currency, this is equivalent to a large increase in the capital offered to borrowers, and results in a consequent lower interest.

Considerations of elasticity, the greater facility given for the prompt and automatic adaptation of the supply of currency to varying demands, the larger opportunities afforded to every rural community to furnish for itself easily and economically the currency which it needs for the convenient transaction of its business, and the ability given to banks to loan more freely to local borrowers, thus favor the issue of bank notes upon the gen-

[1] See diagram in *Sound Currency*, 1896, p. 306.

eral assets of the bank as distinguished from the system of bond security.

138. The only arguments which have been seriously opposed to this plan have been based on the fear that the security provided by general commercial assets would not be equal to that afforded by bonds. The validity of the objection depends entirely upon the character of the assets. Of what, then, do the ordinary assets of banks consist, and what is their amount and character? In this connection it is neither necessary nor proper to consider any one bank apart from the others; for, under the plan proposed in this Report, the notes of each bank are secured not only by its own assets, but also, if those assets should prove insufficient, by such portion as might be necessary of the assets of all the other banks. It is, therefore, the general question of the character of bank assets as a whole with which we are concerned. These assets are the result of loans made by the banks to those carrying on the business of the country; they represent in the main marketable products or commodities in the process of exchange and distribution. They are made by bankers whose interest it is to see that they are sound, inasmuch as the first loss, if any, must fall on the bank and its stockholders. These assets, therefore are based on and secured by the best business of the country; their character rests on that which is a condition precedent to all solvency, individual, corporate, and governmental. Should the time ever come, in this or any other country, when the best business assets were not worth on the average 35 cents on the dollar, a time will have come when government and municipal bonds will likewise be practically valueless. It is conceivable that a government may become bankrupt while the great portion of the private business of the country remains solvent; indeed, this has occurred. But it is not conceivable that the bulk of the private business of a country can become worthless and the government of that country remain solvent; this has never occurred. These considerations make it clear that, taken in the aggregate, there can be no safer security for bank notes than that afforded by the combined commercial assets of the issuing banks. No revulsion which has ever taken

place in this or any other country of similar commercial development has been so serious that it would have impaired the value of notes secured by such assets.

139. Under the plan proposed by the Commission the resources behind the notes would be much greater than is usually supposed. The present capital of all national banks is $631,488,095; and if notes should be issued by all of them to the amount of 80 per cent. of their unimpaired capital, the aggregate would be $505,190,476, for which the security in the form of total assets would be $4,011,403,513,[1] or a protection of nearly 8 to 1. But, it will be said, not all banks will issue notes to this limit; and this will be done mainly by the banks outside of reserve cities. The present capital of the 3,276 banks outside of reserve cities (though including some cities of considerable size) is $401,302,835; of which 80 per cent. would be $321,042,268; for which the security in the form of total assets would be $1,956,216,503, or $6.10 to every $1 of notes.

There can be no question, then, that in the aggregate the security behind the notes would be ample. It is for occasional banks where such would not be the case that the Guaranty Fund is provided. And, finally, the power of the Comptroller to levy assessments as they may be needed to keep the fund good for this purpose insures that these occasional failures will cause no loss to the note-holders.

140. If it should be thought that the security of a prior lien upon all the resources of a bank (instead of a part specifically invested in bonds) is insufficient for the protection of the note-liability, attention is called to the fact that now over 90 per cent. of the large exchanges of goods are performed by the media of exchange created on the basis of the deposit-liability of banks; and that the protection to this liability has always been the general resources of the bank. An enormous volume of checks, drafts, and bills are daily in circulation, expanding with

[1] With a note liability of $198,920,670, the actual assets now held by all the national banks amount to $3,705,133,707. Should their note issues be increased to $505,190,476, their assets would at the same time be increased by the same amount — making the aggregate assets behind the $505,190,476 of notes, $4,011,403,513, as stated.

the expansion of business, constantly coming home for redemp tion and payment, always regarded as a safe medium of exchange — and this circulation is protected solely by the general assets of the banks. When it is noted that deposit accounts of about $2,000,000,000 do a work of more than $50,000,000,000 (as shown by the clearings of the United States),[1] while the note-circulation of the banks is only about $220,000,000, it must be admitted that there is nothing novel or unsafe in basing the smaller amount upon the same security as that of the greater, a security to which the community has long been accustomed. Not only are the note-issues in the proposed plan secured by assets of the same kind, but they are given a prior lien on all this vast sum of resources. There is no reason, therefore, why the note-issue of a bank should not be as good as, indeed much better than, its cashier's draft. No greater obstacles, with some obvious limitations, should be put in the way of the increase in the quantity of the one than of the other, and as rigid requirements should be exacted for the redemption and payment of the one as of the other. In this way, notes will be used if transactions warrant their issue, and be presented for redemption, just the same as a cashier's check, immediately their work is done, thereby giving perfect elasticity.

141. The people of the United States have become accustomed to regard government bonds as the only safe security for bank-issues. It should be clearly understood, however, that perfect security to the note-holder has been obtained under the system proposed herein, in certain sections of our own country in earlier times and in practically all the civilized nations on the conti-

[1] The amount of checks and drafts annually passed through the clearing houses of the United States has for some years past ranged between $50,000,000,000 and $60,000,000,000. These clearings, however, represent only a portion of the checks actually used. There are many checks which never go through a clearing-house at all — being either deposited in the banks upon which they are drawn or, as is usual in the case of out-of-town checks, forwarded by mail for settlement.

Information furnished to the Commission by numerous banks indicates that the clearings represent no more than 75 or 80 per cent. of the aggregate credit instruments actually used. So that instead of $50,000,000,000 or $60,000,000,000, the transactions annually carried on by means of this deposit currency probably amount to from $65,000,000,000 to $80,000,000,000.

nent of Europe today. It should be kept constantly in mind, also, that many losses, due to the inadequate security of bank-note issues in various parts of the country before the Civil War, came from a system in which the notes were secured by the deposit of bonds. The bonds used, however, were frequently state bonds, which, by repudiation or bad legislation, had depreciated or become worthless. It is the unmistakable testimony of our history before the Civil War that the security of bonds did not, by any means, protect the note-holder.

Since the notes are protected not only by the general assets but by the combined guaranty of the other issuing banks in the system, there can be no question as to the security to the note-holder. This point may be regarded as entirely disposed of.[1] The only question to be raised may, conceivably, be as to the willingness of the banks to go into a system in which a combined guaranty (by the guaranty-fund) is created for the safety of the note-holder. This question will be taken up and fully discussed in connection with the guaranty-fund and the history of bank insolvencies, where it will be found that the possibility of loss to the banks by making such a guaranty is inconsiderable.

[1] Professor J. F. Johnson, *Annals of American Academy* March 1898, makes the objection to the Commission's plan that the notes are "too good."

GUARANTY FUND.

142. Where the business of banking is not a monopoly, but is thrown open to any group of persons who may wish to enter it, that is under a régime of so-called free banking, there will probably be a few failures from time to time. Under a system where the business is concentrated in a few hands, risks are less and those which exist are met by larger resources. Above all, the best of experience and business judgment is in charge of affairs There is little more likelihood of the failure of the strong financial institutions of the world, such as the banks of France or England, than there is of the failure of all, or a large proportion of, the banks in the national banking system — an occurrence scarcely more to be anticipated than the breakdown of the whole business community itself. This absolute security, obtainable by committing the business of banking to one or to a few large financial institutions, is sacrificed under a system of free banking like our present one. This is the price paid for freedom of opportunity to engage in the business.

143. It is easy to see why the note-holder should be guaranteed security at the expense of the other creditors of the bank. It is not because of any inherent reason why notes should be preferred to the other liabilities, but chiefly because the notes in order to attain their highest usefulness to society must be made a universal currency. Deposits, although the same in their nature, need not, and indeed, cannot become such a universal currency since each particular check and draft rests upon proof of the depositor's possession of a credit to his order. Notes of banks of small capital would be subject to much the same limitations, unless made uniform by some mechanism which would secure their redemption under any circumstances. This would necessitate delay and expense in making the necessary investigation as to the character of each note, and would thus seriously interfere with their ability to perform their proper function in

exchange. If occasional losses are certain to occur under a system of free banking, some means must be found whereby the notes of all banks, whether failed or not, will be maintained upon an equality. In this way only can bank-notes become a currency of the highest usefulness.

144. A consideration of the nature of the bank-note shows no reason on *a priori* grounds why its holder cannot be protected by the usual means of insurance against loss. The principle of insurance has now been applied to an immense variety of undertakings. Risks of all sorts are now provided against by insurance. The essential idea of the operation is the contribution by those who are engaged in any occupation of a small sum to defray losses to any of the contributors arising from a specified cause. This is sometimes done through the agency of a company which makes a profit upon the transaction, although often directly by those whose interests are involved. In either case the principle would be the same if carried out by those who are insured against loss. And although the cost of insuring the notes might for convenience be paid by the banks themselves, the principle here again would be the same as if it were paid by the note-holders, since it might be shifted to them by the bank, in the shape of higher interest, unless the increase in credit secured to the notes by the operation should result in an additional profit sufficient to compensate the bank for any extra expense involved. The principle of insurance can as a rule be applied only to those losses which are small in amount or recur regularly. It would be inapplicable if losses could not be estimated with some reasonable degree of certainty upon the basis of past experience, so that the amount to be contributed by the individuals concerned could be accurately gauged. Banking experience, however, has been comprehensive enough to afford a basis for calculation. The principle of insurance has in several instances been actually applied to banking in the shape of a safety fund used to guarantee the note holder against loss.

145. Probably the earliest example of a safety fund for the security of the note-holder, is found in New York. The act of April 2, 1829, established upon the recommendation of Governor

Van Buren, a so-called "Bank Fund." This fund was to be created by an annual payment to the state by each note-issuing bank in the system of a tax of one-half of 1 per cent. of its capital stock, until these payments should have aggregated 3 per cent. of the capital stock. The fund was to be invested by the state and was to be utilized to make good to creditors any failure of the assets of insolvent banks to meet the banks' obligations. Whenever the fund should become reduced by insolvencies, it was to be restored by annual contributions of one-half of one per cent. of the capital of the banks of the system until it should reach its original size. The fund was thus intended as a guaranty for the deposits as well as for the notes.

The act establishing the Safety Fund was subsequently modified in several very important particulars. Provision for the immediate redemption of the notes of failed banks, whenever the liabilities in excess of the assets of such banks should not amount to more than two-thirds of the fund, was adopted in 1837. The fund as thus established was first drawn upon in 1837, after it had been in existence for eight years. Losses arising from several failures of minor importance were successfully met from the fund and reimbursed to it from the banks' assets. But it was not until the years 1840–1842 that the fund was really put to a test. In the meantime several of the banks which had been chartered in the speculative period 1835–1837, and which, going into business at such a critical time, had become heavily involved in speculative transactions, found themselves unable to place their business upon the sound basis which legitimate banking demanded. The result was eleven serious bank failures in the years 1840–1842, which drew attention to some of the defects of the law and led to its amendment. In 1842 it was provided that thereafter the fund should be used only for the redemption of the notes of failed banks (and no longer as a guaranty for deposits), after the liquidation of losses already incurred.[1]

[1] In the liquidation of the eleven banks which failed in 1840–1842 and threw so heavy a burden on the Safety Fund, it appeared that only two (the Lafayette Bank and the Oswego Bank) succeeded in paying all their creditors in full without resort to the Safety Fund. The amounts collected by the receivers of the other banks prior to

146. These losses, however, were so great as to necessitate the payment of about $1,600,000 for notes and $1,100,000 for other debts. As the fund at this time amounted to only about $900,000, it became necessary, in order to meet these obligations, to issue stock payable from future contributions of the banks to the fund. The amount of the fund in any case was altogether too small to provide insurance against losses, on both notes and deposits, which might occur in the course of business; while the failure, up to this time, to make the notes a preferred lien on the assets, and to impose an individual liability on the stockholders, threw upon the fund a burden which it should not have been obliged to assume.

In devoting the fund solely to the redemption of the notes, therefore, a step in the right direction was unquestionably taken. But it did not go far enough. More important were the provisions of the constitution of 1846 giving the holders of the

December 1845, and the amounts paid from the fund for notes and for other debts of such banks, together with amounts subsequently realized, were as follows:

	Collections from assets to December 1845	Payments from Safety Fund		Subsequent collections from assets
		In redemption of notes	Payment of other debts	
1. City Bank of Buffalo	$166,576	$317,107	....	$99,996
2. Wayne County Bank	56,744	113,131	$16,078	....
3. Commercial Bank of New York.	303,339	139,837	146,129	7,188
4. Bank of Buffalo	82,837	435,540	149,241	....
5. Commercial Bank of Buffalo	172,864	186,861	424,515	5,000
6. Commercial Bank of Oswego	80,853	163,162	78,351	2,392
7. Watervliet Bank	19,459	134,107	77,484	13,259
8. Clinton County Bank	76,019	71,896	156,257	....
9. Bank of Lyons	37,445	52,898	40,053	3,960
Not specified	....	725	....	6,482
Totals	$996,136	$1,615,264	$1,088,109	$138,277

From this statement it appears that the collections from the assets of the Commercial Bank of New York were much more than enough to meet its notes; while those from the other banks, if applied to the payment of their notes, would have reduced the total net payments of notes out of the Bank Fund to $651,541. Of this sum, however, $252,647 was represented by notes issued by the Bank of Buffalo and the City Bank of Buffalo in excess of the $500,000 which those banks were authorized to issue.

notes of an insolvent bank a first lien upon its assets and making the stockholders individually liable for an amount equal to the stock held by them. The banks had also, in the beginning, been allowed to issue notes subject only to very loose restrictions as to quantity. The result was that notes were over-issued in several cases, and the Safety Fund was actually called upon to redeem over $250,000 of notes issued in excess of the maximum authorized. The safety fund system was perfected in this particular by the act of 1843, which provided for the printing and registry of notes by the Comptroller—all note-issuing institutions being compelled to give up their old plates.

147. As already noted, however, before these amendments were made, a number of serious failures had not only exhausted the fund, but had made heavy drafts upon future contributions for that purpose. Yet an examination of the facts developed in this experience, makes it clear that if the Bank Fund had from the beginning been applicable only to the notes (as after 1842), and if the notes had been originally given a first lien on the assets of the issuing banks (as they were after 1846), and if it had been made impossible for any bank to put in circulation more notes than were authorized by law (as it was after 1843), the total draft upon the Bank Fund on account of these eleven bank failures in 1840–1842—serious as they were—would have been less than $400,000. That is to say, they would not have exhausted one-half of the Bank Fund at that time available.

From the renewal in 1841 of the annual payments to the Bank Fund (½ per cent. per annum on capital), all subsequent contributions for twenty-five years were mortgaged to secure the payment of the principal and interest of the stock issued in 1845[1] to cover the losses already referred to, the greater part of which under a proper system would not have fallen on the Safety Fund at all. Consequently, in this period, there was really no

[1] By the act of April 28, 1845, the Comptroller of the state was authorized to issue stock on behalf of the state, redeemable from subsequent contributions to the Bank Fund, with which to secure funds to settle at once with the creditors of the banks which had previously failed.

security for note-holders except that involved in the provisions limiting the circulation, making the stockholders liable, and giving the note-holders a first lien. But even without any further guaranty, the loss to the note-holders was slight. Of five banks which failed in the subsequent history of the system, one paid its notes in full without delay; three others collected enough from their assets to reduce their aggregate note-issues from $508,535 to $37,057; while the fifth paid about $30,000 of its total issue of $125,000. The net loss, therefore, falling on a guaranty fund in this entire period subsequent to 1842, was only $129,499, which, for the whole twenty-four years, would have been considerably less than 1 per cent. of the average capital; that is, less than one twenty-fourth of 1 per cent. per annum.[1]

The experience of New York with a system of note-issues based on general commercial resources — even complicated as it was with the speculative transactions of the years 1835–1839 — shows that in the whole history of the system the total loss which would have been thrown upon the Safety Fund, if it had been originally established in its finally perfected form, would have been less than $550,000, an amount which would have been met by an average annual assessment of less than one-tenth of 1 per cent. upon the capital.

Other applications of the safety fund principle to the guaranty of notes in the United States were to be found in the state bank systems of Ohio and Iowa, which appear to have given entire satisfaction. Vermont also, in 1831, adopted a system quite similar

[1] These five bank failures were those of the Canal Bank of Albany, in 1848; the Lewis County Bank, in 1854; and the Bank of Orleans, Reciprocity Bank, and Yates County Bank, in 1857. The first redeemed its notes in full. The outstanding circulation of the Lewis County Bank at the time of its failure was $125,283; that of the other banks was: Bank of Orleans, $200,000; Reciprocity Bank, $159,577; Yates County Bank, $148,958. By 1866 the collections from the assets by the receivers had reduced the outstanding amounts to $7,598 for the Bank of Orleans, $10,744 for the Reciprocity Bank, and $18,715 for the Yates County Bank.

In his report for 1867, the Comptroller of the State of New York stated the then outstanding circulation of these four banks to be $129,499. Notice was given that these notes would be redeemed from the surplus of the Bank Fund then remaining, and all which were presented were redeemed in full. Many of them, however, were never presented.

to that of New York, but a few years later permitted the banks to substitute in place of contributions to the common insurance fund, the personal bonds of the stockholders of any bank to redeem its notes.

148. The only banking system in which a Guaranty Fund provision is actually incorporated at the present time is that of Canada. According to the terms of the banking law of 1890, the notes are made a first charge upon all the assets of the issuing bank, including the double liability of stockholders. In addition to this, banks are required to keep on deposit with the Minister of Finance a sum equal to 5 per cent. of the average amount of their notes outstanding during the fiscal year preceding. In case of the suspension of any bank, its notes outstanding draw interest at 6 per cent. from the date of suspension until the date set for their redemption. If such a day is not fixed by the directors of the bank within two months from suspension, the Minister of Finance is authorized to appoint a date upon and after which they will be redeemed from the redemption fund. Until the fund is made good from the assets of the failed banks, all the banks of the system are required to contribute in their due proportion at a rate not exceeding 1 per cent. on their circulation each year.

Since the establishment of this system in 1890, but two bank failures have occurred. In the case of the second failure, the notes of the bank were redeemed by the bank itself, without recourse to the redemption fund. In the case of the earlier one, the liability at the end of two months fell upon the redemption fund, though even here no notes were really presented for redemption from it. No doubt, however, was felt concerning the goodness of the notes, and inasmuch as they drew interest at 6 per cent. from the date of suspension, they were regarded rather favorably as an investment, and were readily received by banks and others.

The successful working of insurance against loss upon bank notes, as embodied in the safety fund idea, has thus been shown to be possible by experience. In the instances just cited, it either succeeded absolutely in securing note-holders against loss, or

demonstrated its ability to do so if properly applied and supplemented by adequate auxiliary measures, such as limitation of note-issue, stockholders' liability, and a first lien on assets in favor of notes.

149. We need not, however, depend solely upon actual experience in the case of banking systems which have put the principle specifically into operation. The theory of insurance is sufficiently worked out to allow a judgment as to the possibility of its application to any class of risks—provided only that adequate statistics upon which to base a judgment can be found. With the safeguards and precautions which are being increasingly thrown about the business of banking, it is improbable that in the future failures of national banks would exceed those of the past. Even though, under the plan proposed in this Report, a stimulus might be given to the establishment of banks in sections where business conditions were so unsettled as to make the danger of failure greater than the past average, this possibility of an increase of failures will unquestionably be more than offset by the general improvement due to the more rigid and thorough investigations provided for. With the discretion lodged with the Comptroller, no bank can be started where it is not clearly shown that the bank is established in good faith and that the capital has been fully paid up. The names of the directors must be given, and the Comptroller will be in a position to refuse his approval of any application where the directors are not men of good reputation. There will thus be no more opportunity for fraud than under the present system. Our past experience, therefore, offers sufficient data upon which to base a judgment regarding the applicability of the insurance principle in the form of a safety fund to guard against losses to note-holders under the proposed system. The results of an examination of this experience will be given in the section on Insolvency of National Banks (pp. 247–259).

150. The guaranty fund provision recommended by the Commission may be briefly described as follows:

Each bank must at all times maintain on deposit with the Division of Issue and Redemption an amount in gold equal to

5 per cent. of its outstanding circulation. This will most naturally be administered precisely as the 5 per cent. redemption fund is now. At the start each bank will be required to put up an amount equal to 5 per cent. of its outstanding circulation, and thereafter, when it takes out an additional amount of notes, it will be required to pay into the Treasury 5 per cent. of such notes for its redemption fund, and another 5 per cent. for the guaranty fund; and whenever it returns any of its notes for cancellation, or deposits lawful money for their withdrawal, it will receive back from the Treasury 10 per cent. of the amount of circulation so retired — 5 per cent. from each fund.[1]

These contributions will aggregate a large sum, which will be available at all times for the redemption of the notes of any individual failed bank without the necessity of waiting until its

[1] The considerations which led to this method of adjusting the fund were these: It seemed very desirable that the fund should, in the early years of the new system, be of sufficient size to inspire confidence in the redemption of the notes of every failed bank. The project to accumulate a fund by imposing an annual tax of ½ per cent., or 1 per cent., had, therefore, to be abandoned at the outset, since it would have left the fund small, and, possibly, insufficient in the early years.

Another favorite proposition has been to establish a fund by requiring each bank to contribute an amount equal to 3 per cent., or 5 per cent., of the circulation taken out, but making no provision for the return to the bank of any portion of such sum in case of the retirement of the circulation. This proposition likewise had to be abandoned, for it appeared that such an arrangement would tend to retard the issue of currency when demanded by temporary business needs; for no bank which could not expect the additional circulation thus called for to remain outstanding for more than a few weeks, or at most a few months, would be willing to go to the expense of paying an assessment of 3 per cent. outright in order to get the notes. If the currency were outstanding for only two months, this would be equivalent to 18 per cent. per annum, a rate which would make the issue of notes out of the question, and necessitate some makeshift such as resort to borrowing currency wherever it might be secured, as at present. Such a proposition therefore, if carried into effect, would have seriously hindered that proper adjustment of supply of currency to business needs which the Commission endeavored to bring about.

The Canadian system, in which the banks maintain throughout each year an amount equal to 5 per cent. of the average outstanding circulation for the previous year, was also decided to be inapplicable, because with so many banks as there are in the national banking system, and the great changes frequently taking place in their circulation, it would frequently happen under such a system, that a bank having in one year only a very small circulation, would be enabled to put out in the next year a very much larger amount of notes without increasing its contribution to the guaranty fund correspondingly.

assets are turned into cash. All notes of such a bank presented for redemption will be promptly paid from this fund, and the notes merely held in the Treasury as a part of the fund until they can be paid by the receiver from the assets of the bank. In the meantime they would be regarded as the investment of a portion of the fund. If, when the affairs of any failed bank were finally wound up it should appear that the total net collections had been insufficient to redeem all its notes, the other banks of the system would be assessed whatever amount would be necessary to meet the deficiency.

INSOLVENCY OF NATIONAL BANKS.

151. The provisions of the national banking act intended to afford protection against losses arising from the insolvency of banks in the national system, consist mainly of general restrictions upon the methods and kinds of business done. National banks are prohibited from permitting their capital to become impaired, from becoming indebted to an amount exceeding the unimpaired capital (except for circulating notes, deposits), etc., from hypothecating their own notes, from making loans to any one person or firm exceeding 10 per cent. of capital, etc. If the capital has become impaired in any way, the deficiency must be made up within three months. They are not allowed to accept real estate as security for loans, or to purchase real estate, or to engage in any industrial undertaking. Each bank is required to maintain against its deposits a certain fixed reserve of cash or of current funds due from reserve depositories. The Comptroller is furthermore authorized to demand reports upon five dates, to be specified by him each year, and he may appoint examiners to investigate the condition of the banks.

152. Under the present national system the protection of note-holders is adequate, and it would seem impossible that they should suffer losses. Even if the bonds deposited should sell for less than the amount of the notes, the latter must be redeemed by the government, which has for the purpose of reimbursing itself a paramount lien upon the general assets of the bank, and in case the assets themselves should not suffice, upon the additional liability of the shareholder. There has, of course, never been an instance in which the value of the bonds deposited did not much exceed that of the notes issued upon them. It follows, therefore, that the note-holder has suffered no loss under the national system, and, whatever the cost at which this result has been obtained, it has given great satisfaction.

The depositor naturally has not been so fortunate. It might

seem that the provisions of the national banking act for shareholders' liability should have been adequate to protect depositors from loss. As a matter of fact, however, the difficulty of collecting the amounts assessed has thrown some losses upon depositors, although such losses have been much less than those under most other systems.

The general restrictions and regulations imposed upon the business of national banking associations are such that if they were closely followed there should be but few failures, except those brought about by causes outside the control of the managers of banks, and impossible to foresee. This conclusion is quite borne out by the causes of failure assigned in the reports of the Comptroller. Among those given in the report for 1896,[1] not less than 117 out of a total of 328 banks declared insolvent during the period from 1863 to 1896, had been wrecked by defalcation or fraudulent management, and the failures of not less than 139 were connected in some way with injudicious banking, or depreciation of securities generally due to bad management. Only forty-three failed as a consequence of general stringency of the money market and consequent hard times. Failures due to injudicious banking and kindred causes cannot be guarded against by law. They will occur under any system, where, as in the national banking act, there is no real restriction of the business of banking to those persons who are competent to conduct it. Just how far security has been afforded to the general public, notwithstanding the freedom with which banks may be organized, may be seen from a short statistical study of the history of insolvency under the national banking laws.

153. The total number of national banks which have failed since the establishment of the system was, at the end of 1897, 352 or 6.9 per cent. of the 5,095 which had been organized. As against this, 1,234 failures of state banks are known to have occurred in the same period prior to the close of 1896. The total number of state banks in operation during the year 1895–6 was 3,708. Adding the 1,234 failed banks to the number in operation a total of 4,942 banks is obtained, and, though a cer-

[1] Pp. 640–654.

tain additional number have doubtless gone into liquidation, or for some other reason do not appear in these figures, it seems safe to say that probably about 20 per cent. of the total number of state banks organized during the period in question have failed. This would be a percentage nearly three times as high as that of the national banks which failed during the same period.

The total capital stock of all insolvent national banks (exclusive of 16 restored to solvency) which failed prior to November 1, 1897 was $58,802,420; their circulation (which was of course met in full) was $20,893,827, and the total claims proved against them $121,768,186. Their total assets were reported as $223,778,713, which, with an assessment on the shareholders of $33,754,070, made a total of $257,532,783. Of these assets, however, $69,478,257 were reported by receivers as doubtful, and $51,-115,315 as worthless. The total collections from assets to November 1, 1897, had been $89,917,461, and from assessments on shareholders, $13,405,486. From these collections, after paying loans and expenses, dividends amounting to $75,935,925 were paid to creditors, making an average dividend of about 62 per cent. on claims proved. Nearly half of the banks which have been finally closed succeeded in liquidating in full, and to their shareholders were returned $5,156,258 in assets at their nominal value, and $1,138,861 in cash.

If we compare this showing with the returns for failed state banks, the results of the comparison are strikingly in favor of the national system. Out of a total of 1,234 state banks that failed between 1863 and 1896, with an aggregate capital of $53,632,-259, nominal assets of $214,312,190, and liabilities of $220,629,-988, the dividends paid amounted to but $100,088,726, or about 45 per cent. as against the 62 per cent. paid by the national banks which failed within the same years. Of the insolvent state banks for which information is given, 158 paid dividends of 100 per cent.; 128 paid 75 or over, but less than 100, per cent.; 184 paid between 50 and 75 per cent.; 203 paid between 25 and 50 per cent.; and 192 less than 25 per cent. Many paid no dividends to creditors, and some were reported as having no stated capital stock.

154. The data accumulated by the Comptroller of the Currency in reference to the national banks which have failed, is valuable for the light it throws upon the probable losses which would, under such a system as that proposed by the Commission, finally fall upon the other banks of the system. From the inauguration of the national banking system to November 1, 1897, 368 banks were placed in the hands of receivers. Sixteen of them, however, were restored to solvency, leaving 352 actual failures. The table which follows, shows the periods within which these 352 failures were distributed, and the number and capital of the banks failing, with the facts as to the collections from the assets of the banks of each group.

Period [1]	No.	Capital	Total nominal assets [2]	Aggregate collections from assets [2]	Loans,[3] disbursements, legal expenses, etc., paid	Net collections from assets
1865–1870....	15	$2,430,000	$ 8,731,713	$3,761,470	$ 644,779	$3,116,691
1871–1875....	25	6,881,100	20,842,847	9,899,196	2,924,889	6,974,307
1876–1880....	44	8,851,500	22,019,654	9,700,678	2,569,765	7,130,913
1881–1885....	20	3,696,300	22,346,282	11,937,206	2,361,317	9,575,889
1886–1890....	35	5,100,000	21,387,470	9,800,295	2,132,577	7,667,718
1891–1892....	40	5,872,000	26,673,415	12,093,708	2,198,374	9,895,334
1893....	54	9,210,000	30,485,752	11,731,007	4,951,825	6,779,182
1894....	21	2,770,000	8,185,971	2,083,223	1,502,408	580,815
1895....	35	4,935,020	13,925,485	4,286,234	2,083,498	2,202,736
1896....	26	3,305,000	13,238,328	2,162,235	1,261,493	900,742
1897....	37	5,751,500	35,891,796	12,462,209	2,046,982	10,415,227
Total....	352	$58,802,420	$223,728,713	$89,917,461	$24,677,907	$65,239,554

The total note issues of these 352 banks which failed prior to November 1, 1897, would have been only $47,041,936 if each bank had issued notes up to 80 per cent. of its capital. The total net collections from their assets, after paying all loans, dis-

[1] The years referred to are "report years," ending with October 31.

[2] The notes issued under existing law being more than covered by the bonds deposited, the notes have been omitted from the liabilities and an amount equivalent to the notes has been omitted from the assets.

[3] Many banks had themselves pledged valuable assets as security for loans. In order to obtain possession of these assets, it was necessary to pay off the loans for which they were pledged. These are the "Loans" included here among disbursements.

bursements, legal expenses, etc., have already been $65,239,554. And it should be kept in mind that large sums of unliquidated assets of banks which have failed in recent years are yet to be included in the above results. So that, taken in the aggregate, the collections from their assets are already far in excess of the maximum amount of notes which they would have had in circulation under the plan proposed in this Report.

155. But, of course, in the case of some of these banks net collections from the assets were largely in excess of any amount of notes which those banks could have put in circulation under the plan proposed by the Commission. Such banks (118 in number) should be excluded from the investigation because they would not only protect the note-holders, but even pay something to other creditors. But it is necessary, for present purposes, to know what would be the situation of those 234 insolvent banks whose net collections to date from assets fall short of 80 per cent. of the bank's capital. The results of such an examination appear in the following table :

Period	No.	Capital	Net collections	Amount by which net collections fall short of 80 per cent. of capital
1865–1870	9	$ 1,320,000	$ 753,039	$ 302,961
1871–1875	11	2,375,000	1,186,738	713,262
1876–1880	24	6,064,500	3,316,538	1,535,062
1881–1885	8	700,000	360,636	199,364
1886–1890	14	1,850,000	881,506	598,494
1891–1892	30	4,472,000	1,377,211	2,200,389
1893	36	5,335,000	1,487,551	2,780,449
1894	19	2,660,000	460,535	1,667,465
1895	28	4,385,000	1,235,057	2,272,943
1896	25	3,155,000	577,821	1,946,179
1897	30	3,976,500	1,288,190	1,893,010
Total.....	234	$36,293,000	$12,924,822	$16,109,578

It is to be observed that the net collections do not include the sums yet to be obtained from assets now unliquidated. Hence the $16,109,578, by which net collections fall short of 80 per cent. of the capital, will be much diminished by further collections. The table above, it will be noticed, is based upon

the actual assets of these banks at the time of their failures, deducting the amount realized from the United States bonds and applied to their notes.

156. If each of these 234 banks, in addition to its actual liabilities at the time of its failure, had issued notes up to the limit of 80 per cent. of its capital under the plan proposed in this Report, the nominal value of its assets would have been increased by the same amount. A reasonable basis for estimating what amount would have been realized from these additional assets is the proportion actually collected from its other assets. Had the bank had an additional amount to loan it must be assumed that it would have been loaned on security similar to that upon which its other loans were made. Applying this method of estimating what would have been the net collections had each of these banks actually issued notes to the amount of 80 per cent. of its capital, it is found that in the case of 56 banks out of the 234 above mentioned the net collections from the assets, without resort to stockholder's liability, would have been more than sufficient to meet all of their notes, even if issued to the amount of 80 per cent. of their capital. The estimate as to the remaining 178 banks, in which resort was necessarily had to the stockholders' liability, is set forth in the table which follows:

Period	No.	Capital	Maximum probable issue (80 per cent. of capital)	Actual net collections	Estimated net collections from assets[1]	Estimated net deficiency to fall on shareholders
1865–1870.....	4	$ 520,000	$ 416,000	$ 201,836	$ 291,202	$ 124,798
1871–1875.....	4	800,000	640,000	231,943	330,469	309,531
1876–1880.....	16	2,622,500	2,098,000	753,881	1,201,017	896,983
1881–1885.....	5	350,000	280,000	89,941	189,841	90,159
1886–1890.....	11	700,000	560,000	175,341	310,207	249,793
1891–1892.....	23	3,647,000	2,917,600	873,150	1,486,512	1,431,088
1893.....	26	4,510,000	3,608,000	988,301	1,756,812	1,851,188
1894.....	17	2,485,000	1,988,000	360,925	831,846	1,156,154
1895.....	23	3,875,000	3,100,000	995,981	1,767,820	1,332,180
1896.....	24	3,105,000	2,484,000	542,861	942,549	1,541,451
1897.....	25	3,025,000	2,420,000	679,696	1,062,140	1,357,860
Total.....	178	$25,639,500	$20,511,600	$5,893,856	$10,170,415	$10,341,185

[1] Including actual net collections and estimated additional collections from the additional assets in exchange for which notes would have been issued.

157. In the computation just given, the 178 banks examined have been considered as an aggregate. It is clear that these 178 banks may be divided into two classes, one in which the actual collections from shareholders exceed the net deficiency to fall on shareholders as estimated above, and a second in which these actual collections fall below such estimated net deficiency. Dividing the 178 banks into these two classes, the actual collections from the shareholders of these banks were as follows:

BANKS WHERE ACTUAL COLLECTIONS FROM SHAREHOLDERS EXCEEDED ESTIMATED NET DEFICIENCY.

Period	No.	Capital	Estimated deficiency to fall on shareholders	Actual collections
1865–1870	1	$ 50,000	$ 1,205	$ 4,000
1871–1875	..	....	......	......
1876–1880	4	430,000	135,675	207,326
1881–1885	2	150,000	14,183	113,369
1886–1890	6	350,000	116,711	181,566
1891–1892	7	1,525,000	444,440	645,559
1893	7	1,750,000	464,764	718,081
1894	3	485,000	100,216	143,484
1895	2	1,050,000	14,182	159,815
1896	5	550,000	161,184	235,393
1897	3	450,000	107,446	146,293
Total.....	40	$6,790,000	$1,560,006	$2,554,886

In 40 out of the 178 banks, wherein assessments were levied on shareholders, the collections thereby obtained thus amounted to $2,554,886, or more than enough to cover the deficiency of $1,560,006, which represents the sum not provided by collections from assets necessary to meet their notes in full. This was not true, however, of the other group of 138 banks.

In 138 out of the 178 banks, requiring assessments on shareholders, it is found that the assets did not provide sufficient funds to meet the notes by $8,781,179; and that the assessments on shareholders actually furnished only $2,724,428 towards making up that deficiency. It is solely with banks in this group of 138 that we are concerned, because the notes of only these banks were not covered by assets and stockholders' liability; and the notes of only these banks would become a charge upon the Guaranty Fund.

BANKS WHERE THE ACTUAL COLLECTIONS FROM SHAREHOLDERS WERE LESS THAN ESTIMATED DEFICIENCY.

Period	No.	Capital	Estimated deficiency to fall on shareholders	Actual collections
1865–1870	3	$ 470,000	$ 123,593	$ 3,370
1871–1875	4	800,000	309,531	68,785
1876–1880	12	2,192,500	761,308	250,308
1881–1885	3	200,000	75,976	42,601
1886–1890	5	350,000	133,082	68,083
1891–1892	16	2,122,000	986,648	467,587
1893	19	2,760,000	1,386,424	437,189
1894	14	2,000,000	1,055,938	467,555
1895	21	2,825,000	1,317,998	316,414
1896	19	2,555,000	1,380,267	367,420
1897	22	2,575,000	1,250,414	235,136
Total. ...	138	$18,849,500	$8,781,179	$2,724,428

158. A further examination of the 138 banks, in which the actual collections from assessments upon shareholders were less than the estimated deficiency, to fall on shareholders, shows that there are some banks included in which no assessment upon shareholders was made because, though the net collections were less than 80 per cent. of the capital, they were nevertheless greater than the actual liabilities of the bank. There are also very many banks in which the first assessment was for less than 100 per cent. But the present law gives the Comptroller no right to make a second assessment for the remainder of the 100 per cent., if the first is not collected in full. This defect, the plan recommended by the Commission proposes to correct. If, therefore, assessments had been made in accordance with the Commission's plan, the deficiency in the case of 26 of the 138 represented in the last of the foregoing tables would thus have been made good, and the condition of the remaining 112 would have been as set forth in the following table:[1]

[1] In making this calculation, in those cases where an assessment of less than 100 per cent. was made, the collections from that assessment have been taken as the basis of the estimate as to what the collections would have been if the full 100 per cent. had been assessed. In those cases where no assessment was made the basis of the estimate is the actual average collections in the same period from such assessments as were made.

Period	No.	Capital	Estimated deficiency in collections from assets	Estimated collections from shareholders	Net deficiency falling on guaranty fund
1865–1870.	3	$ 470,000	$ 123,593	$ 7,026	$ 116,567
1871–1875.....	3	750,000	306,703	116,634	190,069
1875–1880.....	7	730,000	409,228	251,560	157,668
1881–1885.....	..	......	......	......	......
1886–1890.....	3	250,000	97,755	68,115	29,640
1891–1892.....	14	1,947,000	910,541	570,364	340,177
1893.....	17	2,610,000	1,366,358	907,144	459,214
1894.....	12	1,500,000	828,622	420,709	407,913
1895.....	20	2,625,000	1,228,993	401,322	827,671
1896.....	16	2,395,000	1,353,957	476,626	877,331
1897.....	17	2,125,000	1,160,980	529,799	631,181
Total.....	112	$15,402,000	$7,786,730	$3,749,299	$4,037,431

159. In all of the preceding discussion the returns for the whole number of banks (352) which have failed since the beginning of the system have been used. Of these 352 banks, however, only 181 have had their affairs finally closed. The remainder (171) are as yet unsettled, and have nominal assets of $60,997,117 still unliquidated, so that nothing definite can really be said concerning many of them. An estimate of the loss likely to fall on the other banks of the system under a

ALL INSOLVENT BANKS WHOSE AFFAIRS HAVE BEEN CLOSED.

Period	No.	Capital	Total nominal assets	Aggregate collections from assets	Loans, disbursements, legal expenses, etc., paid	Net collections from assets
1865–1870....	15	$2,430,000	$8,731,713	$3,761,470	$644,779	$3,116,691
1871–1875....	24	6,831,100	20,507,741	9,812,273	2,840,129	6,972,144
1876–1880....	43	8,101,500	19,242,445	8,088,988	2,130,592	5,957,879
1881–1885....	18	3,246,300	15,521,117	7,658,778	1,576,569	6,082,209
1886–1890....	31	3,600,000	11,591,542	3,796,834	1,751,458	2,045,376
1891–1892....	20	1,737,000	4,872,436	2,188,974	600,291	1,588,683
1893....	18	1,925,000	5,311,157	2,486,432	763,496	1,722,936
1894....	4	425,000	905,407	304,943	172,995	131,948
1895....	7	535,000	919,511	371,726	162,839	208,887
1896....	.....	....	....	....	....	....
1897....	1	50,000	105,219	10,470	3,396	7,074
Total	181	$28,880,900	$87,708,288	$38,480,888	$10,646,544	$27,834,344

plan of note-issues like the one proposed by the Commission can, therefore, be more safely and fairly based upon the results arrived at in considering only the failed banks whose career has been fully terminated.

The preceding table presents the capital, aggregate collections from assets, loans, disbursements and legal expenses paid, and net collections from assets for the closed, insolvent banks of the system during its whole history, according to the Comptroller's figures.

160. It is seen that the table just given is made up on the same basis as that given at the outset for all the failed banks of the system. In order to ascertain what loss to the guaranty fund would have resulted from the failure of these banks, it is necessary to carry the figures through the same processes adopted for the returns of all the failed banks of the system. If this be done, it will appear that of the 181 banks whose affairs have been finally closed, the notes of but 31[1] would have ulti-

[1] The process by which the figures for the thirty-one banks are reached is as follows:

1. The sum by which the actual net collections from assets of the aggregate of these 181 banks fell short of 80 per cent. of their capital was ascertained.

2. Those banks whose net collections amounted to 80 per cent. of their capital were excluded.

3. If 80 per cent. of notes were issued it is assumed that an equivalent amount of assets would be held; and the same proportional part of these added assets it is assumed would be collected as was obtained from other assets. These assumed collections were added to the net collections, and the total collections were subtracted from 80 per cent. of the capital to obtain the estimated deficiency which would fall upon shareholders.

4. Those banks whose actual collections from shareholders exceeded the deficiency estimated to fall on such shareholders were then excluded.

5. The actual collections from shareholders of the remaining banks were then increased by an amount obtained by supposing that the Comptroller should assess (as recommended by the Commission) shareholders to the full amount of capital stock, and supposing that he could collect the same percentage of such assessments as was actually collected.

6. The banks whose collections thus estimated exceeded the estimated deficiency were then excluded.

7. The estimated collections for the remaining banks (numbering thirty-one) were then subtracted from the estimated deficiency in collections from shareholders to obtain the ultimate amount which must be met by the guaranty fund.

mately become a charge upon the other banks of the system. The results of such an analysis are displayed in the following table :

CLOSED INSOLVENT BANKS WHERE A DEFICIENCY MIGHT HAVE FALLEN ON OTHER BANKS.

Period	No.	Capital	Maximum probable note issue (80 per cent. of capital)	Deficiency to fall on share-holders	Estimated collections from share-holders	Ultimate deficiency to fall on other banks of system
1865–1870....	3	$470,000	$376,000	$123,593	$ 7,026	$116,567
1871–1875....	3	750,000	600,000	306,703	116,634	190,069
1876–1880....	7	730,000	584,000	409,228	251,560	157,668
1881–1885....	.....	....	....	....	....	....
1886–1890....	1	50,000	40,000	13,750	1,805	11,945
1891–1892....	9	712,000	569,600	345,667	183,814	161,853
1893....	5	500,000	400,000	280,685	229,415	51,270
1894....	1	50,000	40,000	25,127	14,240	10,887
1895....	2	100,000	80,000	77,016	51,357	25,659
1896....	.....	....	....	....	....	....
1897....	1	50,000	40,000	28,946	15,548	13,398
Total....	31	$3,412,000	$2,729,600	$1,610,715	$871,399	$739,316

It will be recalled from the table given on page 255 that out of the original 352 the number of banks in the case of which a deficiency would have fallen upon other banks was 112. As just seen, thirty-one out of this 112 were banks whose affairs had finally been closed, leaving eighty-one, in the case of which, although a deficiency exists at the present date, something further may be realized from unliquidated assets.

161. These remaining eighty-one banks, not yet closed, in the liquidation of which to date, there would still have been a deficiency to fall on the guaranty fund, are mainly banks which have failed since 1890. Under the system proposed in this Report, according to the method adopted above, it appears that the total net investment of the guaranty fund to date in the notes of these eighty-one insolvent banks would be only $3,298,115, while the remaining unliquidated assets of the same banks as shown in the following table, amount to $23,396,466 :

INSOLVENT BANKS NOT YET CLOSED, WHERE A LOSS WOULD FALL ON GUARANTY FUND TO DATE, AND STATEMENT OF UNLIQUIDATED ASSETS FROM WHICH THE DEFICIENCY MAY STILL BE MET.

Period	No.	Capital	Deficiency to date to fall on guaranty fund	Remaining assets
1865–1870	......	....	....	....
1871–1875	......	....	....	....
1876–1880	......	....	....	....
1881–1885	......	....	....	....
1886–1890	2	$200,000	$17,695	$ 11,803
1891–1892	5	1,235,000	178,324	2,727,714
1893	12	2,110,000	407,944	1,961,300
1894	12	1,450,000	397,026	1,805,974
1895	18	2,525,000	802,012	4,623,467
1896	16	2,395,000	877,331	7,739,611
1897	16	2,075,000	617,783	4,526,597
Total	81	$11,990,000	$3,298,115	$23,396,466

162. From the liquidation of these remaining assets it is altogether probable that enough will be realized before the banks are closed to reduce the entire net loss to fall on the other banks of the system, in the case of the 171 banks (capital $29,921,520), the accounts of which are not yet closed, to an amount at least as small as the ascertained maximum loss for the 181 banks (capital, $28,880,900) which have been finally closed. Should this be the case the net loss to date, to fall on the other banks of the system, would be less than $1,500,000. Even for the period since 1890, when failures have been most disastrous, this would amount to but $1,000,000 — less than $150,000 a year — which, on the basis of an aggregate circulation of 80 per cent. of the capital for the banks of the country as a whole, would have been met by an annual assessment of less than one-twenty-fifth of one per cent. on the outstanding circulation of the national banks; while during the whole period, 1864–1897, the net losses, as already estimated, would have been met by an annual assessment of less than one-seventieth of one per cent. on an outstanding circulation of $300,000,000. It should be remembered that this percentage, low as it is, includes

an estimate on the final outcome from the 171 banks not yet closed. The one preëminent fact, however, which appears from the whole examination, based upon the results of banks actually settled — and this is the only set of facts we yet have — is that, throughout the whole history of the national banking system, final losses would have fallen upon the guaranty fund only in the case of thirty-one banks, amounting to but $739,316, or less than one one-hundred-and-fortieth of one per cent. per annum on an outstanding circulation of $300,000,000.

So far as experience goes, then, it seems that the losses which would have been incurred under the national banking system, had no bond deposit been required, and which might, therefore, be expected, were no such deposit demanded, have been insignificant. Even if the solvent banks were all obliged, as they must be, to make good the notes of failed banks to the note-holder, the losses to be met by them would have been so small that they might almost be neglected. In short, a guaranty fund seems to give a security equal to that of a bond-deposit system, but at an infinitesimal fraction of the cost.

WORKING OF THE COMMISSION'S PLAN.

163. It may be well to consider in a practical way the working of a system of note-issues based upon all the resources of the bank without the particular pledge of any specified portion of the assets for the notes. Under the plan proposed by the Commission, the note-issues may be considered from four points of view:

I. As affecting the note-holder;
II. As affecting the other banks in the system;
III. As affecting the depositor;
IV. As affecting the relative position of city and country banks.

I

The only possible basis for consideration in a system of bank-note issues, and one which must be regarded as fundamental, is an absolute protection to the note-holder. This must be accepted as axiomatic. Not only would a system which did not provide absolute security to the note-holder have no chance of adoption, but it would also be a distinct wrong to the business community to propose it. The national bank-note of the present system has earned a well-deserved confidence, because the basis of its security has been unquestioned. Moreover, the note of one bank should be so protected that it is as good as the note of any other bank, no matter in what part of the country it may be circulated. Perfect uniformity of bank-issues throughout the length and breadth of the land is essential to a good currency. The note of a bank in Maine must be equally good if offered in Texas. That condition exists under the present system, and the same result must be achieved under any system which shall be devised to take its place.

It may be taken for granted, then, that the ends to be attained in the proposed plan are not only (1) perfect security to the note-holder, but also (2) entire uniformity of issues by all the

banks of the system. In order to secure these ends, the Commission has recommended a system by which it is confidently hoped that uniformity, as well as absolute security to the note-holder, will be obtained. This plan, in brief, authorizes the issue of notes by any bank to an amount not exceeding its unimpaired capital, less its investment in real estate;[1] a first lien in favor of the note-holder upon all the assets of the bank; and, if the foregoing should be insufficient, a prior lien upon the stockholders' liability, which is for an amount equal to the capital of the bank; and, finally, the creation of a guaranty fund of 5 per cent. on outstanding circulation. A heavy tax of 6 per cent. is laid upon any notes issued in excess of 80 per cent. of unimpaired capital; so that we may go upon the assumption that notes will not, under the proposed system, exceed, in ordinary times, 80 per cent. of the capital. It is also provided that the notes of every bank shall be receivable at par for debts due to all other national banks and to the government. It is believed that such a system will protect the note-holder beyond peradventure; and that, in practical operation, no holder of the note of a failed national bank could ever lose a cent.

164. It should be kept in mind that the Guaranty Fund is clearly distinct from the Redemption Fund. The Guaranty Fund, contributed by each bank in proportion to its note-issues, is a fund held in trust by the Treasury and reserved solely to provide for the immediate redemption of notes of failed banks. It is intended that no period of time shall ever exist during which there shall not be on hand a sum sufficient to redeem the notes, even of a failed bank. Without this fund, between the date of the failure of a bank and the time when the receiver could have realized in cash upon the assets of the bank, there would be a time when notes

[1] That portion of a bank's capital which is invested in real estate (*i. e.*, banking house, etc.) is evidently rendered for the time unavailable and cannot be considered a commercial asset. Were the bank to fail, the amount of the capital, which is the first guarantee against loss to the note-holder, would be decreased (so far as immediate realizability was concerned) by the investment in real estate. The Commission's plan has therefore restricted the notes to an amount equal to that portion of the bank's capital which will take the form of live commercial assets, or immediately realizable funds of some sort.

could not be redeemed, even though their ultimate redemption were assured.[1] Under the plan of the Commission, it is provided that the notes of failed banks in any part of the country shall be redeemed out of this common Guaranty Fund without any delay in waiting for realization upon the assets of the bank by a receiver. This provision perfectly secures uniformity in the value of the notes of every bank in any part of the country. Any note, whether of a failed or solvent bank, will, at any time, be redeemed on demand at the Treasury, or, at the discretion of the Secretary of the Treasury, at any sub-treasury of the United States.

On the supposition that the present circulation may be increased from about $200,000,000 to $300,000,000, there would be a Guaranty Fund of $15,000,000 always ready to meet the redemption of notes of insolvent banks. At any one time this would be fully sufficient to cover the notes of a failed bank, or of a group of banks. But it should be understood that this does not necessarily imply an assessment upon other banks. The Guaranty Fund will be used in the purchase of the notes of failed banks to the full extent of those presented. But these notes, for the time being, keep the fund nominally intact, at least while the assets are in process of liquidation. As fast as cash is realized, this will be first used to replace the notes held by the Guaranty Fund; and so long as there are any assets yet unliquidated to meet notes in the Guaranty Fund, no assessment will be made on the other banks. An assessment can take place, then, only for the few notes for which no assets can be realized at the close of the liquidating process by the receiver.

165. In order to act as a brake upon excessive issues, it is provided in the plan of the Commission that all notes beyond 60 per cent., and less than 80 per cent., of the capital of a bank shall be taxed, so long as they are outstanding, at the rate of 2 per cent. per annum; while in lieu of an absolute prohibition of note-issues in excess of 80 per cent. of the capital, each bank is permitted to issue an additional 20 per cent., subject to a tax at

[1] In the Canadian banking system the notes of insolvent banks bear interest until redeemed. (See section 148.)

the rate of 6 per cent. per annum. The interest on any portion of the Guaranty Fund invested by the Secretary of the Treasury and the taxes upon emergency issues, just described, would, in time, furnish permanent additions to the Guaranty Fund, and thereby establish public confidence in the practical sufficiency of this sum for all possible protection to the notes of failed banks.

166. The Guaranty Fund thus described provides for the immediate redemption of the notes of any failed bank, while the prior lien on the assets and stockholders' liability of the bank, together with the operation of the fund in case of deficiency, make up the provisions for the ultimate and final security of the notes. As distinct from this ultimate security (which is believed to be full and more than sufficient), and the provision for the immediate redemption of the notes of insolvent banks, the plan of the Commission provides for the daily and immediate redemption of the notes of all solvent banks by the maintenance of a 5 per cent. Redemption Fund, as now required by law. Each bank is required to redeem its notes on demand at its own counters, and also at Washington, or at any sub-treasury which may be designated by the Secretary of the Treasury. This Redemption Fund is a part of the assets of the bank. As a matter of course, the banks must keep on hand cash enough to redeem their own notes, and the part of this sum placed in the Treasury is only intended as a matter of convenience to intercept in the commercial centers the stream of notes coming in for redemption which would otherwise be presented at the counter of the bank. The purpose of a Redemption Fund is to make redemptions more easy and rapid for the community. It is no added burden to the bank, which would be obliged to perform the same service at its own counter, if no Redemption Fund existed. To be required to send notes home to each bank in remote parts of the country, however, is an inconvenience which is obviated by the existence of a Redemption Fund placed in those centers where notes are most likely to be in circulation. The daily and immediate redemption of notes at its own counter and through the Redemption Fund, which must always be kept intact, provides a constant test of the condition of a bank to

meet immediate demands. This system of redemption, moreover, will be much more effective under the new than under the present system. Notes will constantly be coming in for redemption to every bank, and it will be impossible for any one bank to keep its notes in circulation beyond the amount actually needed by the community.

II.

167. We pass now to the effects of the plan of note-issues, as here proposed, upon the other banks in the system. The objection might very naturally arise in the minds of bankers that, under the system of a Guaranty Fund, supplied by all the banks issuing notes, the well-managed banks would be sustaining badly-managed banks, with the result that there would be no penalty visited upon poor management. Clearly good bankers might not wish to enter a system by which they became responsible for issues of notes over which they could have no control; and they might say that untrained or fraudulent managers might put out excessive issues based on worthless assets. It is therefore well to examine this objection in the light of experience.

It is evident that the failure of a bank to provide proper assets to meet its note-liability must depend upon either (1) bad judgment, or (2) fraud. It should be said at once that these two elements of danger can create no greater obstacles to successful management in banking than in any other business, and that average honesty, as well as occasional dishonesty, must be given its due weight. The possibility of fraudulent mismanagement of bank assets may possibly be magnified too greatly. Even in the organization of banks, where the opportunities for fraud would perhaps be greatest, it is inconceivable that the number of cases of fraud could ever be large relatively to the whole field of banking. Before the Comptroller approves the application and grants a bank authority to commence business he has to be satisfied that its capital has actually been paid up as represented, that the directors are men of good and substantial reputation, and that the undertaking is a *bona fide* one.

All this guards against fraudulent practices at the outset just as frequent examinations and reports make it difficult to conceal extensive frauds in the later course of the bank's existence.

Nothing is more common and fallacious than to reason that what is true in a particular case is true in general. For instance, if a single bank had been known to fail, and if assets had proven insufficient to cover the note-issues of that bank, it would be fallacious to assume that the same would be the case at once with many or all banks. Failures due to dishonesty and mismanagement will sometimes happen, but it is undoubtedly true that these will be only sporadic cases. Therefore, the objection to the proposed scheme from the fear that bank assets would be often or generally insufficient is based on the erroneous assumption that fraud will be general and chronic on the part of the issuing banks. An objection based on this general assumption can certainly have little value. It, moreover, proves too much. To assume that fraud in regard to banking assets would be so general as feared by timid persons, presupposes a condition of morals in the community such that fraud would be so prevalent in all forms of business as to make it impossible for ordinary trade and exchange to go on as it does now. Business as it exists today would be impossible. On such an assumption it would not be practicable to obtain a proper number even of bookkeepers or officials who could be trusted. But the supposition on which this objection to the scheme is based is every day and hour contradicted by the fact that we do go, in banking as in all other business, on the belief that fraud is the exception and not the rule. The objection to the plan of the Guaranty Fund as thus stated on the ground of any general prevalence of fraud is hypercritical and largely imaginary.

Bankers are as honest as the average man in other branches of business. The banks, therefore, entering into this system run no peculiar risks, owing to the requirement of contributions to the Guaranty Fund, since their responsibility extends only to losses determined by the average honesty of business men. That is, the losses they will be obliged to meet from fraud will be exceptional, and the amount of these will be very small in

comparison with the total circulation, and will be no serious burden to the Guaranty Fund. This fund is founded on the theory of insurance by which a very small premium from each participant is sufficient to provide a considerable sum to cover individual losses.

168. It is well known that in the whole history of our national banks, bank failures were greatest in the years 1893–1897. In 1893, if all the banks in the system had issued notes to the full amount of 80 per cent. of their capital (as contemplated in the proposed plan), the sum would have been $548,000,000. The aggregate circulation actually issued by the banks which failed in 1893, would have been only 1⅓ per cent. of the aforesaid possible circulation under the plan proposed. That is, if upon the failure of these banks all their notes had been presented for redemption before a dollar had been collected from their assets, only about one-third of the Guaranty Fund would have been invested in such notes. During the process of liquidation, however, it appears that the amount which, up to November 1, 1897, would not have been recovered to the fund from the assets of the banks would have been less than $460,000, or less than one-tenth of 1 per cent. of the proposed circulation Only $51,270 of this sum, however, was a final deficiency from the eighteen banks failing in 1893 whose accounts have been closed. The remaining $407,944 belongs to the other thirty-six banks; and to meet it there would still be a resort to their unliquidated assets, amounting to $1,961,300.

The facts are more conclusive if, instead of one period of frequent failures we pass under review the whole period of the existence of the national banks. Of the 352 banks which failed in the national banking system from 1863–1897, only 181 have had their affairs finally settled. The net collections to date from 150 of them have been such as to indicate that, if each had issued notes to the amount of 80 per cent. of its capital, every dollar of their circulation would have been met from their assets, and that no deficiency would have fallen on the Guaranty Fund or on the other banks. In the case of the remaining 31 banks, the net deficiency which would have fallen on the other banks, by assessment, would have been less than $750,-

000—which would have been met by an average assessment, on a circulation of $300,000,000, of less than $\frac{1}{140}$ of 1 per cent. annually during the thirty-five years' existence of the national banking system. Of the 171 banks whose affairs have not been closed, 90 have already collected enough to show that under the system proposed all their notes would have been met from their assets; while the remaining 81 banks have unliquidated assets of over $23,000,000 from which to meet $3,298,115 of notes which might, at the close of 1897, have been advanced from the Guaranty Fund. If the ultimate net deficiency here should be $750,000, which is a little more than the deficiency in the case of the 181 banks whose accounts have been closed, the total net loss from the 352 failures would have been met by an average annual assessment of one-seventieth of 1 per cent. on a circulation of $300,000,000.

169. Therefore, on the basis of banking assets, as disclosed in the history of the present system, it is beyond question that all losses upon the note-issues of failed banks, after recourse to the general assets of the bank, and to the stockholders' liability, will in fact be easily met by a Guaranty Fund of 5 per cent. as proposed, without imposing any serious burden on the other banks in making good occasional deficiencies.

Having shown that the losses which will fall upon the Guaranty Fund will not in any case be serious, it should be also borne in mind that, in the plan of the Commission, responsibility for the notes of other banks affects only those that issue notes, and even then only in proportion to their note-issues. It may be possible that great city banks which are now able to do a very large business and earn their profits without the use of any notes whatever, may continue to do their business without resort to note-issues at all. So far as this takes place these banks would be entirely unaffected by the requirements for the Guaranty Fund. In case need should arise for the temporary issue of notes, when the need for the issue had passed, and measures had been taken to retire their notes, their contributions to the Guaranty Fund would be withdrawn and their responsibility for the issues of other banks would thereupon cease.

If it be taken into account how small the losses to noteholders from the failure of banks might have been, as previously discussed, it will be found that only a very small part of the Guaranty Fund would have been called upon to meet the sporadic cases of bad management. How small this amount would be, as determined by the character of the assets held by the banks, during the last thirty-five years, must surprise those who may not have investigated the facts. The banks have, moreover, been able under the present law to pay a tax of 1 per cent. on circulation; and yet the average annual assessment on circulation for the Guaranty Fund, as already shown by the experience of thirty-five years, would have amounted to not more than one-seventieth of 1 per cent. Attention in this connection should be called to the recommendation of the Commission that the expenses of the banking system should not be provided by a tax on circulation, but by a tax on capital and surplus. Hence, if there should be no other tax on circulation, the insignificant contribution for the Guaranty Fund cannot be said to be heavy.

170. To rest the security of the notes on the general assets of a bank gives direct importance to the fact that good or bad banking depends entirely upon the kind of discounts made. Hence it is proposed under the new plan to obtain as far as possible an improvement in the methods of examinations and reports upon the character of the resources of the banks. The mere fact that banks have a responsibility, no matter how slight, for each others' notes, will induce a habit of vigilance and watchfulness over the character of other banks that will not only make each more careful as to the discounts it makes, but will constantly tend to drive to the wall mismanaged institutions. Banks showing bad judgment or fraudulent intentions under this system would be so hard pressed by other banks to meet their obligations that they could not long exist.

It should also be kept in mind by other banks in the system that the method of rapid and constant redemption which is likely to take place under the proposed system would make it impossible for the mismanagement of banks to go on long unobserved. Hence the system of redemption affords a protection

of great practical importance to the other banks in the system as a means of detecting the character of their banking resources. The quality of the assets of each bank will be constantly tested by the requirement to pay its notes on demand.

The new provisions as to stockholders' liability will, also, have the effect of creating vigilance among owners of stock as to the responsibility of fellow stockholders, and thereby increase the disposition to watch closely the management of the bank.

III.

171. It is necessary next to discuss the provisions in the proposed plan for the protection of the note-holder so far as they affect the depositor. Attention should again be called to the fundamental assumption upon which any system of bank-note circulation must be based. This assumption is that the note-holder must be given absolute safety. It is useless to discuss note-issues on any other basis. Under the present national banking system the note-holder has absolute security; and it is believed that also under the new system, as already fully described, the note-holder is given absolute and perfect security. This is as it should be. Inasmuch as the note moves to a distance from the issuing bank, and cannot perform its proper function as a convenient currency except where members of the community are in no way obliged to investigate the individual character of each bank whose notes are in circulation, the security for each and every note must be thoroughly established independently of the management of any particular bank. The position of the depositor is necessarily different from that of the note-holder. The former is usually one close to, and able to inform himself about, the bank in which he deposits. He is in a position, moreover, where he may be expected to choose his depository bank for himself, and very properly to face all risks of his own judgment in this matter. It is instantly to be seen that the state could not possibly undertake by regulations to protect a depositor in the exercise of his own voluntary judgment in regard to good or bad banking-management. It is clear, therefore, that the depositor stands in a different relation to the

bank than the distant and innocent note-holder. The depositor, it is true, may be protected in general by regulations peculiar to his case — by publicity, by frequent examinations, and by vigilance of the Comptroller against loose and fraudulent methods. Beyond this banking regulations cannot advantageously go.

172. We now approach the question first raised as to the effect of the proposed plan on the depositor with two clearly defined propositions which all must accept: First, that the depositor holds a different position relatively to the bank from the note-holder; second, that the note-holder under any practicable scheme must be made absolutely safe. With this understanding, it may be well to discuss the effect on the depositor of the prior lien on the assets of the bank in favor of the note-holder. It is well understood that for the notes issued, the bank has received an equivalent amount of resources. Under the present national banking system, a part of the assets at least equal to that received in return for the issue of notes is, in the beginning, taken irrevocably away from the depositor; and, in order that it should not possibly fall into any other hands, it is invested in bonds and deposited with the government. Under the present system, therefore, the note-holder has a claim upon the assets of the bank prior to all other claims. The new system proceeds upon the same principle. Although the method of affording the protection is different, only the same amount eventually goes to the note-holder under the proposed as under the present system. Consequently, in either system the assets covering the note-issues are necessarily so placed that they cannot go to the depositor.

A national bank which, under the present law holds in its resources, say $500,000 worth of bonds, as a protection to its notes which are out (we will suppose for simplicity) to an equal amount, would, under the new system, hold $500,000 of general resources (instead of bonds in the Treasury) to cover an equal amount of notes. The resources behind the depositor are thus not affected by the change of the bond resources into the form of other general resources. On this additional amount of

$500,000 of general resources behind the notes, the depositor should have no more claim than if those resources existed, as now, in the form of bonds. Merely because the additional resources corresponding to the bonds are held in the possession of the bank and not by the government, the depositor has no right to assume that this fact gives him any moral precedence on what lies behind the notes. In the case of mismanagement and fraud, under the present national bank system, the depositor would suffer directly by the effect on the resources lying behind his deposits. In short, the only way in which the depositor can be protected from mismanagement is, that directors should direct, and not by casting eyes upon the means of protecting the note-holder. Good management will inspire confidence and insure large deposits under either system of banking; and under either they will with good management be equally safe.

173. In most cities there now exists keen competition between national banks on the one hand and state banks and trust companies on the other hand. It may be said by state banks to depositors, that it would be desirable for them to deposit with the state banks, because, if they deposited with a national bank under the new system, the note-holder of the national bank would have a prior claim upon the assets of the bank in case of failure, and that consequently the deposits would be safer with the trust companies and state banks. We have already shown that on entering the new system, a national bank would have in its possession more resources by exactly the amount of its present bond-holdings kept for security of its notes. Under the present national bank system, by which the portion of the assets intended to secure the notes is placed with the government, in order that mismanagement may by no possibility reach them, losses from bad banking can still fall upon the resources behind the deposits. Under the new system the depositor would be worse off only on the supposition that the resources behind the notes, being in the hands of the bank, were thereby liable to mismanagement. The risk to the depositor resolves itself, as in every case it must, into a question whether the bank is well or badly managed as a whole.

Such statements as the above, however, may be used by the state banks and trust companies to influence depositors at a time of distrust in the money market. At a critical time depositors might be induced to withdraw large deposits from national banks for fear that in case of failure the note-holders, having a first lien, might exhaust the resources of the bank. Among unthinking depositors this might be used to the disadvantage of the national banks. It should be observed as to this point that the national banks would have a remedy in their own hands. To a timid depositor, they could offer, instead of a deposit, their own notes, which would be a first lien upon the resources of the bank, and the depositor would then be even better off with the national bank than if he held a deposit in a trust company or a state bank; for, as before explained, the notes would be absolutely safe.

In fact, it is apparent to every one that the unimpaired capital, which necessarily appears in the resources, furnishes an amount of assets which acts as a buffer to receive losses before they reach the depositor. If the note-holder has a prior lien before the depositor, it is equally clear that the depositor has a prior claim before the shareholder, and the capital must be totally impaired before a loss can fall upon the depositor. No other precedence of claims is defensible under any banking law

It might be remarked in passing that if a national bank found itself pushed by the competition of trust companies under state laws, it might create a situation under the new system which would give the depositor exactly the same protection as now under the system of a deposit of bonds to secure the note-holder. That is, if a bank wished to guard against any objection to the position of the depositor under the new system as compared with the present, it might take that portion of its resources which was equal to its note-liability and deposit these resources with a trust company as trustee for the note-holder. Then the bank would stand in exactly the same position relatively to depositors as a national bank does now.

174. It is, moreover, not believed that depositors would prefer a trust company under state laws to a national bank

under the proposed plan, or *vice versa*, upon any such analysis of bank accounts as has here been given. It will be found, that depositors, in fact, place their accounts with banks quite irrespective of such considerations as have been advanced above. If depositors actually did analyze accounts in order to determine where to keep their funds, then in banks which have smaller deposits relatively to capital (which, as before said, must be impaired before losses can fall on the depositor) they would find greater security. But all the business world knows this not to be the case. Depositors, as a rule, deposit where deposits are already large. A well-managed bank, having the confidence of large interests, and already having large deposits, thereby attracts other deposits. Smaller depositors naturally reason that if men in charge of large estates select a certain bank for the deposit of large sums, they must have good grounds for their confidence, and they follow their example without more examination. The banks obtain deposits on the principle of "to him that hath shall be given." The accumulation of deposits by a bank in any place depends so entirely upon its reputation for good management, that it is quite independent of the particular system under which the bank is doing business. A trust company or state bank will obtain deposits, not because it is acting under a state law, but directly and solely because of the confidence of the depositors in the reputation and management of the bank. And the same holds true of a national bank today; it will accumulate large deposits, not merely because it is a national bank, but because it is a well-managed bank. Under the proposed plan, the deposits of the community will be distributed, undoubtedly, for the same reasons as now—because of the confidence of the depositors in the relative management and reputation of the respective banks. Objections, therefore, to the proposed scheme on the above mentioned grounds of its effect upon depositors, must be, without doubt, largely fictitious.

IV.

175. It is important also to examine into the effect of the plan of the Commission upon the relative positions of city and

rural banks. Of course, any one familiar with the operations of banking perfectly understands that the profit to a bank does not necessarily depend on its power to issue notes. On this point, however, a widespread misapprehension exists. It is supposed that by granting to banks the privilege of issuing notes, there is conveyed to them a means of making large profits and of monopolizing the market for loans. This belief is erroneous. At the very outset we are met by the fact that our largest city banks, almost without exception, make very little or absolutely no use of their right to issue notes; and yet these great banks make a profit from banking and accumulate a surplus. How can this be, if the note-issues are so important a privilege?

A bank in reality makes a profit by buying and selling. In making a loan or discount, it buys the right (duly secured) to receive money in the future, and it pays for this right by creating a liability to pay the borrower on demand from its resources. The profit arises from giving the borrower a claim for immediate payment less the bank discount or profit. It follows that the gain to a bank is settled by this discount operation, and resides in that. And this profit is the same to the bank whether the demand liability is issued to the borrower in the form of its notes, or in the form of a deposit-account to his credit. Whether one or the other form of liability is actually used, depends not upon the will of the bank, but upon the choice of its customers. In the great financial centers the banks adapt themselves to their constituents, who do not wish to carry notes about, but who find it much safer and more convenient to pay for the most part by checks or drafts on deposit accounts. This explains why the richest city banks with enormous deposits, do a profitable business without issuing any notes.

It is quite otherwise in rural districts: there the small borrower calls for notes, and seldom uses a deposit account. Upon the presentation of proper collateral, and a loan being asked for, the bank cannot grant it, unless it is able to provide that kind of bank currency—that is, notes—which the habits of the community force the borrower to choose. If, as under the present national banking system, the small banks of the South and West

find it unprofitable to issue notes or to obtain them in some way, then it will often happen that, even where banking capital exists, it cannot be used in the particular way which would be of most advantage and convenience to the community in which it is placed.

The present system, it has elsewhere been pointed out, requires banks of issue in rural districts to withdraw from those sections for investment in bonds large amounts which would otherwise naturally be loaned to local borrowers. The city banks, on the other hand, whose business is carried on by the use of deposit currency, are not thus required by our present law to invest in bonds as a basis for that form of currency, but are permitted to loan their funds freely to borrowers. The Commission proposes to remove this inequality by giving to the country banks the same freedom in loaning their funds to local borrowers which the city banks already possess.

176. The plan of the Commission will work in the interest of the rural communities, and of small borrowers in those regions. Indeed, the plan is only carrying out equal justice and fairness to all classes and to all parts of the country. The large city banks do their business and earn a profit mainly without the use of note-issues. They create a form of currency, of a highly efficient quality as a medium of exchange, by which profits are obtained. No tax, however, is levied upon this medium of exchange, while the currency of country banks, that is, note-issues, is taxed. To allow to other parts of the country, where the note-liability is the only convenient form of completing the discount operation, an equal right to an untaxed medium of exchange, and to one also based upon the general commercial resources of the bank, is no more, no less, than justice. The recommendations of the Commission, therefore, concern mainly the small producers and borrowers in districts other than the financial centers.

It is true that if the method of issuing notes is made less burdensome and expensive, the city banks may issue more notes than now. They would do this, however, only provided they could supply other (and generally rural) communities with notes,

in default of sufficient local banking facilities. At present, for reasons illustrated by the figures elsewhere given, the country banks borrow of the city banks, and thereby obtain the currency which they do not now issue themselves. Under the plan of the Commission, the main demands of rural districts for notes will be supplied by the country banks, and they will not be obliged to depend so largely on the cities.

INSTANCES OF BANK NOTES BASED ON COMMERCIAL ASSETS.

FOREIGN BANKS.

177. An appeal to the experience of other countries in regard to methods of securing bank-issues is a necessary part of our duty. It must be noted, however, that the history of European systems will not furnish instances of needs exactly parallel to our own. There the banks exist under special charters, and with large capitals, while we are now concerned with a free banking system with many small banks. The examination, however, will determine to what extent in other countries notes based on general commercial resources have been found to be safely secured.

178. In France a monopoly of the issue of notes resides in the Bank of France, which is neither required to deposit bonds as a special security for its notes, nor obliged to invest in such form any large portion of its assets. With a capital of $36,500,000 (182,500,000 francs) it is permitted to issue notes freely to the amount of $900,000,000 (4,500,000,000 francs) and even within this limit it is not governed by any legislative restrictions as to the amount or character of the reserve it shall hold against its liabilities. When the bank discounts a note for a borrower, and pays the proceeds to him in the form of its notes, those notes are based on the general assets of the bank, including, of course, the commercial paper acquired by the bank in the transaction. The notes of the Bank of France have always enjoyed the highest possible credit, and were but slightly depreciated even during the years about the time of the Franco-Prussian war, when specie payments were suspended. The credit and solvency of the bank have always been unquestioned.[1]

[1] The system of deposit-accounts has not been much developed in France. Consequently, except for the large substratum of gold and silver coin in general use, the medium of exchange furnished by the Bank of France consists almost wholly of notes.

179. In Belgium and the Netherlands, the principle of basing bank-issues on ordinary commercial paper has been followed, and has resulted in a perfectly safe currency. In Belgium the national bank is forbidden to loan on mortgages or industrial stocks, or to take part in industrial enterprises. In this way its assets are confined very largely to legitimate commercial discounts. No portion of the assets is set apart for the note-holders, as distinguished from the other creditors of the bank. The only restriction upon its power to issue notes is the requirement that it hold specie to an amount equal to one-third of its outstanding notes and other demand liabilities; but in

The condition of the bank on January 6, 1898, is shown in the following statement, which for convenience in comparison, has been thrown into a form similar to the usual national bank statement:

CONDITION OF THE BANK OF FRANCE JANUARY 6, 1898.

(Reduced from francs on the basis 5fr. = $1.)

ASSETS.		
Loans and discounts,		$192,684,735
Loans on collateral,		81,683,210
Government bonds and loans to government,		78,521,522
Real estate and banking offices, fixtures, etc.,		3,712,496
Cash Reserves:		
Gold,	$388,185,711	
Silver,	241,325,284	
		$629,510,995
Other assets,		11,534,310
		$997,647,268
LIABILITIES.		
Capital,		$36,500,000
Surplus and undivided profits,		8,503,101
Notes in circulation,		772,525,430
Government deposits,		54,813,790
Other deposits at Paris,	$94,334,529	
Other deposits at branches,	13,748,495	
		$108,083,024
Other liabilities,		17,221,923
		$997,647,268

The habits of the people being what they are in regard to using notes rather than deposit-accounts, the bank is obliged to conform its action to the requirements of its constituents—which explains the predominance in its account of note-issues over deposits. For this reason France furnishes the type of a bank and a constituency nearly like that of the country banks and communities in the United States, where notes are demanded, and deposit-accounts are little used.

emergencies even this requirement may be suspended by the government. The circulation amounts usually to about $90,000,000 (450,000,000 francs), and is redeemable in coin on demand. The Bank of the Netherlands issues notes upon very similar conditions, although a metallic reserve of 40 per cent. of the notes and deposits must be held. Otherwise there is no limit to the issues; and, if there is at any time a demand for additional currency, the bank is able to supply it at once—the notes being based, like all the other liabilities of the bank, on its general assets. The notes are redeemable in gold.

180. In each of the Scandinavian countries, Norway, Sweden, and Denmark, there is a state bank, permitted to issue notes without any special investment in, or deposit of, securities. The amount of such notes is limited in the first place to a fixed amount ($6,430,000 in Norway, $12,060,000 in Sweden, and $8,040,000 in Denmark). Beyond these limits, notes may be issued equal in amount to the reserve maintained; and the banks of Norway and Sweden are permitted to count foreign balances as a part of their reserves. In each system a definite specie reserve against liabilities is also prescribed.[1] The banks are thus free to increase the volume of notes with any increased demand, and the result is an adequate and elastic note circulation, redeemable on demand in gold.

181. The notes issued by the banks of Germany and Aus-

[1] In Sweden there are also twenty-seven smaller banks of issue. These banks, are free to issue notes without the deposit of any special security, to the amount of the total credits due them (but not exceeding one-half the capital) plus the metallic reserve held in excess of 10 per cent. of the capital. If they wish to issue notes beyond this amount they must invest a portion or all of their capital and surplus in mortgages, and deposit them with government officials. This is one of the few instances in which the principle of note-issue against general assets has been parially abandoned in Europe.

In Switzerland also the system of issuing notes upon commercial paper as well as other assets, has been combined with an effort to protect the note-holder. Forty per cent. of the circulation must always be covered by a coin reserve. The remaining 60 per cent. of the notes are covered by the deposit of any good assets, including commercial paper. The system is thus similar to that of other continental countries in that it permits the issue of notes based upon general commercial assets, but differs from any other in requiring that those assets shall be set aside for the protection of the note-holder.

tria-Hungary are similarly based upon the general assets of the banks, and have no prior claim over depositors or other creditors. The banks of Germany (the Imperial Bank, and eight independent banks) are allowed to issue notes to the amount of $92,000,000 (385,000,000 marks) against their general commercial assets, and, beyond this, to the amount of the cash[1] held by them. They report these items four times a month, and if for any bank the uncovered note-issue exceeds the authorized amount, the bank is subject to a tax upon the excess at the rate of 5 per cent. per annum. To this is added a provision that the cash reserve held, exclusive of the notes of other banks, shall always be equal to at least one-third of the circulation issued, and that the notes not thus covered by cash shall be covered by discounted bills running not longer than three months and protected usually by three, never less than two, endorsements—that is to say, by ordinary quick commercial paper. The banks are thus enabled to furnish a bank currency which is ample in volume and of great elasticity, and of unquestioned security. So, too, in the Austro-Hungarian Bank, the notes are based with all other liabilities on the general resources of the institution. Notes may be issued, as in Germany, to the amount of gold and silver coin and bullion held; also, additional notes to the amount of $80,000,000 (200,000,000 florins) beyond such metallic reserve; and notes may be issued even beyond this limit on payment of a tax of 5 per cent. per annum. The reserves of coin and gold bullion, however, must never fall below 40 per cent. of the note circulation.

182. One of the best examples of the free issue of notes upon commercial paper at the present time is found in Scotland.[2]

[1] They are permitted to count as "cash" for this purpose Imperial treasury notes, notes of other banks, German coin, and gold in bullion or foreign coin at a specified rate.

[2] The note-issues of the Bank of England are not here discussed, because they do not furnish an instance of bank issues in the proper sense; they are in no way a credit currency; they are, of course, notes not based on general assets, but they are also not notes secured by the deposit of a special portion of bank assets, because the Issue Department is entirely separated from the Bank Department, and hence the Issue Department acts as a quasi-public institution for the issue of notes on a stratum of £16,800,000 of government bonds at the bottom, and on gold for each additional note

The Scotch banking system was originally perfectly free and subject to no restrictions whatever either regarding the quantity of notes or the adoption of any special means to secure their ultimate payment. Although an upper limit to the amount of the "uncovered" circulation was set by law in 1845, the issue of notes continued with this exception, unrestricted, the limit set being the average circulation outstanding during the year preceding the passage of the act—£3,087,209, plus the amount of coin held. Owing, however, to the subsequent failure of two of the existing banking institutions and the consequent lapse of their circulation, this limit was lowered to £2,676,350 (this of course, being in addition to notes representing gold and silver actually held) where it now stands. Thus for the month ending October 30, 1897, the average circulation outstanding amounted to £7,445,142—the specie held being £5,972,809. With this amount of specie, their limit of circulation was £8,649,159. In other words, if there were a demand for additional currency, the banks would be perfectly free to expand their note issues £1,204,017 without securing additional coin reserve, and of course without the necessity of investing in any particular securities. Failures under the Scotch system have been few, only two having occurred since 1845. In neither case was there any loss to creditors. And though the notes had no preference over other liabilities of the banks, they were readily accepted by the other banks at par, because of the certainty of their ultimate payment—the liability of the stockholders being unlimited. The Scotch banking system has been of immense assistance in developing industry by providing an elastic note currency and rendering possible many small industrial operations which would otherwise have been out of the question, and has also familiarized the population with banking operations through the wide distribution of its numerous branches.

The notes of the six banks of issue in Ireland are secured by their general resources, without preference of noteholders over

issued. In England the notes of the joint-stock banks are, however, based on their general assets; but, as is well known, the amount of these issues is insignificant and must remain so.

other creditors and are limited in amount in the same way as the notes of the Scotch banks.

183. The banking system which presents the closest analogy to that proposed by the Monetary Commission is the Canadian. In the instances of notes issued against general assets already cited, the monopoly feature predominates. But in the Canadian banks is found a more or less competitive system. The banks of the Canadian system are thirty-eight in number, and are, it is true, chartered and not free banks. Still, as a matter of fact, banking with the right of note-issue is not really a monopoly, since permission to engage in the business can easily be obtained by any group of persons raising the requisite capital of $500,000.

The most distinctive feature of the Canadian banking system, is the method of note-issue, which, within the limit of 100 per cent. of capital, leaves the issue of notes entirely free. The provisions for the security of the note-holders include liability of shareholders for a sum equal to stock held, first lien of note-holders upon the assets of failed banks, the "Bank Circulation Redemption Fund," and the payment of 6 per cent. interest upon the notes of failed banks from the date of refusal to redeem to the time when readiness to redeem is announced.

The double liability of shareholders and the first lien of note-holders upon the assets of failed banks, are familiar provisions. Down to 1880, in Canada, note-holders stood upon equal terms with depositors so far as the lien upon the assets of failed banks was concerned. It, therefore, several times occurred in cases of failure that the notes of failed banks sank below par, sometimes considerably, because the assets were not sufficient to meet both the total note and deposit liabilities, though they would have been more than enough to cover the notes. The Bank Act of 1880, therefore, provided that the note-holder should be given a prior lien over the depositor. Double liability of shareholders is of much longer standing, going back to 1834 in Ontario and to 1841 in Quebec.

The Bank Circulation Redemption Fund dates only from 1890, and was intended as a provision supplemental to that granting the note-holder a prior lien upon the assets. That the

provision was suggested by the banks themselves indicates that they did not consider it as a serious burden to them. Inasmuch as the total assets of each bank were from four to ten times its note-obligations, it was thought that the ultimate security of the notes was amply provided for ; and the object of the fund was merely to insure the prompt payment of the notes in case of delay at the hands of the liquidator. Freedom from even temporary depreciation has also been sought in the provision that the notes draw interest at 6 per cent. from the date when payment should be suspended. They thus become a desirable investment and are gladly held by the other banks for the interest they bear.

The banks have been left free to establish branches should they choose to do so. The result has been that, with the advantages given by the freedom of note-issue, a network of branches has been developed, which carries the most ample banking facilities to every part of the Dominion, and so equalizes the rate of interest that the farmer or other borrower in the far West can obtain loans at practically the same rate of interest as the borrower with equal security in the older provinces.

The system thus established has had an eminently successful career since 1880, and has furnished a highly elastic note-circulation contracting and expanding very readily in accord with varying business demands. There has, however, been no tendency to inflation. The volume of the notes has seldom much exceeded 65 per cent. of the aggregate capital stock of the banks, notwithstanding the limit is the par of the capital. Any excess of notes above the needs of business has been promptly retired through the operation of the system of redemption elsewhere described.[1]

Even if the earlier history of the system, before its distinctive provisions had been fully developed, be considered, the record is highly favorable. Since 1867 the total losses to the creditors of the banks have aggregated but $2,000,000, or about $72,000 per annum, representing a loss of only about $1 on every $3000 of the average liabilities. Since 1880, there have been

[1] See pages 328–330.

eight failures, and in every case assets have been sufficient to pay the note-holder in full; so that since the notes were made a first charge on the assets, notwithstanding the fact that several of the failures were due to gross mismanagement and fraud, there has been no loss whatever to note-holders; nor would there have been any loss to fall on the other banks of the system through the guaranty fund.

EARLY BANK ISSUES IN THE WEST AND SOUTH.

184. Public attention of late years has been so directed to the bond-security feature of the national banking system, that our earlier experience with bank notes based upon general assets has either been entirely ignored or has been set aside as a disastrous experiment. A brief examination of that experience, however, may serve to show to what extent a desirable bank currency was actually furnished under a system of issue on general assets, and to what defects its failure was due in those instances where it did not furnish a satisfactory currency. The experience was extensive. Prior to the passage of the New York "Free Banking" law in 1838 all note-issues were based on general assets, and between 1838 and 1865, while both the bond-security and general-asset systems were in operation in this country, side by side, it is probably true that the notes most eminently satisfactory were those based on general commercial assets.

The history of banking in the United States prior to the Civil War may be roughly divided into two general periods: one ending just prior to 1840, the second extending from that time to the establishment of the national banking system. The earlier period was generally characterized by loose methods due to inexperience and ignorance of banking principles. In some portions of the country however, changes for the better had, begun to be made even during the latter part of this first period. The establishment of the Suffolk Bank system in New England, and the Safety Fund banks in New York during the latter half of the decade 1820–1830, marked a new era in the history of American banking, but outside the Eastern and Northern states an unsettled condition of things prevailed until con-

siderably later. The lesson of the experience of these more favored portions of the country could not be learned by the other states until the operation of the newer and sounder systems of banking could be observed and the evil effects of the looser methods had been fully felt. Hence, it was not until after 1837 that the country as a whole began to place its banking system upon a sounder basis. It was not until that date that the safety fund and bond-security systems became fully developed in New York. Some time too was required to make the Suffolk system effective. An explanation of the weakness and unsoundness of the earlier banks seems to be possible. Nearly all of their faults were due to the inexperience or dishonesty of the founders.

185. One very important source of weakness in the earlier period lay in the ownership of the various institutions. The stock was frequently owned by the state alone, or, at best, belonged only in part to private individuals. Thus during the period from the opening of the century to 1837, Mississippi, Kentucky, Alabama, Louisiana, and Georgia established banks in which the state owned from one-fifth to one-half of the total stock. South Carolina, Tennessee, and Arkansas, established institutions owned by themselves exclusively. In nearly all of these cases, however, ownership by the state turned out disastrously. Thus, in the case of Kentucky, the state bank had not been long in existence before it was forced to enter into a species of mutual debt-responsibility with the state, and it was never able to overcome the evils resulting from this relationship. In Alabama, the bank in which the state was interested came to its end with considerable political scandal and with a dead loss to the state of several millions. Much the same was true in Mississippi, although here, as in Alabama, the difficulty arose from defective, rather than from excessive, control by the state. In Tennessee a state bank chartered as early as 1820 was obliged to close in 1832 because of irregularities and over-drafts, due to the conduct of persons in high authority in the state.

186. The custom of founding banks with an insufficient capital was a prime cause of failure. States which contributed

to the capital stock of a bank usually did so by the issue of bonds which might or might not be salable, or merely by the pledge of the state's "credit." Illinois, for instance, in 1821 chartered the State Bank of Illinois with a capital of $500,000, entirely based upon the credit of the state. No capital was ever actually invested, and the bank eventually failed. The Bank of the State of South Carolina, chartered in 1812, was owned by the State and had almost no capital whatever.

This inadequacy of capital was admittedly the cause of failure in numerous instances where the state subscribed a large portion of the capital directly. In the case of the "property banks" of some of the Southern States—Louisiana, Florida, Mississippi—the capital was not paid in at all, being merely represented by mortgages on the property of the subscribers, while the only actual funds provided were obtained by the sale of bonds issued by the state. In case the bonds were held in the vaults of the bank they yielded no immediate returns and practically furnished no capital at all.

The charter of the Union Bank of Louisiana, dated 1832, provided for a nominal capital of $7,000,000, but went so far as even to specify that none of this capital need be paid in. Subscriptions to capital stock were to be covered merely by the giving of a mortgage on real estate for the amount of the subscription, while the actual funds of the bank were provided by an issue of $7,000,000 in bonds by the State. Similar institutions were chartered in Florida, Louisiana, and Arkansas in 1833 and 1837 respectively. All of these banks issued notes which speedily depreciated, and all finally failed, with heavy losses to creditors.

In the case of the founding of a bank by private individuals, the means of obtaining the capital were somewhat different, but the outcome was substantially the same. In organizing a bank the first step usually taken was to secure a charter from the state legislature. This might then "form the basis of a speculation in shares,"[1] or might be sold by those who had obtained it to persons desirous of carrying on a bank. Notes were ordi-

[1] WHITE, *Money and Banking*, p. 361.

narily issued as soon as 5 or 10 per cent. of the capital of the bank had been paid in. The bank was then ready to begin business, and ordinarily began at once to discount the paper of the business public. When the subsequent installments of the subscription became due, the bank was usually ready to advance the amount of the installments on the basis of the stockholder's promissory notes, issuing its own notes to them and receiving them back in liquidation of the installments due. The capital was thus fictitious and the whole operation was illegitimate Moreover, public opinion was generally against demanding rigid redemption of notes in specie.

187. The feature of the earlier banks, which was probably the most destructive to them, was their use as auxiliaries in all sorts of speculations. The banks were not regarded as regular institutions founded for the sole purpose of furnishing loanable capital to persons of unquestioned credit. This speculative use of the banks was not so marked in the case of the state-owned institutions as in that of private corporations, but the former frequently lent their assistance in operations of a doubtful character. Thus, in 1837, an extended scheme of internal improvements in Illinois led to the increase of the capitals of the two state banks by $1,000,000 and $2,000,000 respectively. A state loan of $3,000,000 to pay for the new stock was authorized, but the bonds could not be sold for par, and had to be taken by the banks themselves in payment of the installments of the stock. Private banks sprang up in immense numbers wherever there was a doubtful speculation to be carried on. Those who had no capital sought to acquire it by starting a bank and utilizing its "credit." Many who could not obtain loans at reputable banks were among those who established new institutions.

188. As already mentioned, there were usually no special provisions for the protection of the note-holder, nor were there any regulations regarding examinations, reports, and the like—even the amount of the notes to be issued being seldom restricted. Many of the banks issued notes to several times the amount of their capitals. Thus the Bank of the State of Alabama was char-

tered by the act of 1823 to issue notes "in such sums as the president and directors might deem most expedient and safe," the only restriction being that no notes of denominations less than $1 should be issued. Even this restriction did not long continue, and notes for 6¼ cents and 12½ cents, 25, 50, and 75 cents, redeemable only when presented in sums of $5, made their appearance. The Bank of North Carolina issued notes to twelve times its specie on hand.

The earlier bank charters in the South and West seldom contained any provisions for the additional liability of stockholders or other protection of note-holders. Bank officers and directors were given no special degree of responsibility, either personal or financial. From this omission it resulted that losses due to the failure of banks fell entirely upon creditors, while the irresponsibility of those in charge usually prevented penalties from being imposed upon those to whom they belonged.

189. There was, moreover, no uniformity of regulations among the several states. The issue of a certain sort and denomination of notes might be prohibited in one state, but this was of little avail, because the restrictions might not exist in a border state, so that the depreciated and insecure currency of the one circulated throughout the territory of both. Pennsylvania, for example, prohibited the issue of bank-notes smaller than $5 after October 1817, but did not prohibit the use of such money if issued by banks in other states. This resulted in an immediate influx of the small notes of neighboring states, so that conditions were the same as before.

190. In addition to this, the business conditions of the times were such as to increase opportunities for expansion. The population being comparatively small and not dense, there was practically no field for the development of a deposit-system or for the use of checks. The issue of notes was the almost universal method of making loans to borrowers. Inasmuch as there was an entire absence of provision for redemption at places other than that where the bank was located, there was constant danger of over-issue and expansion. The notes were likely to remain out longer than they should, and this tended to

encourage the bank to issue more than it could redeem. All of this gave to banking in the West and South an irresponsible character.

191. The most important cause of weakness existing in the case of almost all banks of the period, whether state-owned or not, was the lack of a proper redemption system. To secure adequate redemption was always difficult, and the conditions of transportation and communication were such as to make the enforcement of such a system upon banks which were attempting to evade it practically impossible. This state of affairs was aggravated by the fact, already mentioned, that during the early banking period under discussion the note was almost the only form of immediate bank liability. For agricultural communities like the American states during their first period of development the check and deposit system could not have been introduced. This is the reason why most of the outstanding demand liabilities of a bank were necessarily in the form of notes and thus, if the notes were not kept constantly subject to redemption, there was danger of an over-expansion of loans even by banks which were honestly managed. The means resorted to in order to keep the notes in circulation as long as possible were often entirely illegitimate, such, for instance, as the establishment of the bank in an inaccessible spot, so that it would not be easy to send the notes home for redemption.

The methods of redemption too were rendered worse by the universal failure to comprehend the importance of the distinction between immediate and ultimate redemption. Many banks issued notes upon the basis of land and unsalable property of various sorts, and had but little or no means for the current redemption of their notes in coin. In the case of the "property banks" of Louisiana and the states before referred to, it was considered legitimate to invest all the capital in real estate securities, which could not be realized upon in specie when needed for immediate redemption of notes.

Closely analogous to the attempts to avoid real redemption, by making it impracticable to present the notes, were the agreements entered into between banks not to present one another's

notes for specie. It is clear what the outcome would be when redemption was thus evaded. The notes, no longer likely to be presented in considerable quantities, since they would accumulate to large amounts only in banks, could by virtue of such agreements be issued practically without limit by the various institutions. An instance in point was that of the Bank of Kentucky. In 1817 the legislature of the state legalized an agreement between the parent bank and its branches, by which none was to be bound to receive the notes of any of the others. This was at a time when the bank was closely connected with the state in its financial affairs, so that it seemed as if citizens of the state were forced to accept the notes of an institution which was unwilling to receive them back. In 1819 three of the principal banks of North Carolina entered into an agreement not to pay specie for their notes. In order to avoid the payment of specie the State Bank of North Carolina required every individual presenting notes to take an oath that he was not a broker.

This system enabled banks to expand their notes easily, but it fell short of the essential of sound currency, a rapid and certain redemption. In this respect the South and West lacked the influence of what had been of such advantage to the New England banks. In the latter, the Suffolk Bank system forced a redemption through the whole trade region tributary to Boston; in the former region, the second United States Bank in its attempts to enforce redemption of state bank notes met the same hostility that first appeared against the Suffolk Bank system, but, unfortunately, the United States Bank had no commercial or legal authority to secure redemption in specie against an opposing public opinion. The politicians took advantage of this hostility caused by the Bank's efforts to secure redemption of the notes of local banks; and when the fight went against the Bank it was a virtual defeat for the redemption of state-bank notes, and in the end reacted upon the community, which thereby suffered from a bad currency.

192. The beginning of the change from the defective methods of this early speculative period in Southern and Southwestern banking to sounder and more satisfactory methods occurred in

most of the states at about the same time, namely, during the years from about 1837 to 1840. This advance was due to several causes. All through the earlier period just surveyed, the weak and irresponsible banks had done far less damage than they might, had there been no strong institution like the Bank of the United States to maintain some order in the currency. This institution had provided a circulation of known soundness, and, wherever its branches were located, good banking facilities also. It, however, came to an end at the expiration of its charter in 1836, owing to the attack upon it made by President Jackson. It became necessary to have sound and well-managed institutions of some sort to fill the place of the Bank of the United States. The crisis of 1837 showed the weakness of many of the banks, and, by destroying some of them, cleared the ground for sounder institutions. Besides this, the speculative period itself drew to a close with the crisis of 1837–1839, and there began to be clearer ideas of the nature of banking, while a developing business demanded that financial institutions should be put upon a stable basis.

As has been seen, the issue of notes during this period had taken place under no special restrictions. Also, as has been before remarked, the early systems of banking had been based upon general commercial assets which had been the only security for the notes. This fact has frequently led to a misunderstanding. It has sometimes been supposed by those who compared the earlier systems with the national banks that the fact that the noteholders had no other security than the general assets of the institution was somehow the cause of the worthlessness of the notes and of the serious losses resulting therefrom. Had the assets been good, the notes issued upon and secured by them must have been equally as good. The same would be true of notes issued upon bond security. Unless the bonds were of high character, the notes would not be better than those based upon doubtful commercial paper. It is not a bond-secured system, but a system secured by bonds of high character which furnishes a safe currency. And in the same way the goodness of notes based upon commercial assets depends solely upon the goodness of

those assets themselves. The defective character of the earlier notes was thus due to the worthlessness of the assets of the banks, in other words, to the injudicious or dishonest management of the institutions. As has been pointed out, this was owing to several causes, the chief of which were troubles connected with state ownership, inadequate or fictitious capitalization, lack of proper redemption systems, and the generally defective character of public opinion on the subject of banking.

EVOLUTION OF SOUNDER BANKING.

The fact that the defects of the early banks of the West and South lay not in the system of securing the notes, but in the absence of proper redemption and of good management, is clearly established by a study of some of the sound state banks carried on subsequent to 1837–1839, which also issued notes against general assets. An examination of early systems of bond-secured notes, too, will fail to show any superiority in this method of issue.

193. One of the earliest of the sound institutions established at this time was the State Bank of Indiana which was chartered in 1836, for twenty years with a capital of $1,600,000, and issued notes based on commercial assets. It was a parent bank with ten branches, but the parent bank was really only a board of control, all the business being done by the branches. It was thus merely a system of banks under a general management. Although it began business at a very critical moment, just prior to the crisis of 1837, it survived and became one of the best banks of the country, going out of business at the expiration of its charter with great credit. Whatever merits the bank possessed, however, were due not so much to any peculiar method of securing its notes, as to the excellence of its management. Although the bank was twice forced temporarily to suspend, owing to the suspension of the other banks of the country, its notes were never over-issued and it had at no time a less sum than 20 per cent. of its demand liabilities on hand in specie. At the expiration of the charter a considerable premium was returned to shareholders. Loans were for the

most part made by the issue of notes, such deposits as it held being chiefly mere deposits of money for safe-keeping. It was a pure bank of issue operating in a community where industry was chiefly agricultural, and its history may be considered as fairly typical of what the banks of the South and West might be under a banking system which should allow the issue of notes based on commercial paper.

194. There were many other cases of successful banks issuing notes based on general assets. In Louisiana the evils of previously existing systems of banking led at last to the passage of the sound and stringent banking act of 1842, the main provisions of which were directed to securing a quick redemption of notes based on the general resources of the bank, responsibility of bank officers, and the acceptance only of live commercial paper as a basis for banking operations. Under this law some degree of order was restored to the banking system of the state. Louisiana banks thereafter held satisfactory specie reserves, and carried on business in a creditable manner until the Civil War.

The Bank of the State of Missouri, chartered in 1837, was the only bank in the South and West which did not, at least temporarily, suspend specie payments. Its notes were constantly redeemed on demand in specie, and it continued for many years to furnish a satisfactory currency. As late as 1856 this institution and its five branches were the only incorporated banks in Missouri.

Tennessee chartered the Bank of Tennessee in 1838, and it continued to transact business until as late as 1866. The institution did not have a very prosperous career but it at least succeeded in paying its notes—the most important part of its liabilities—in full. The Bank of South Carolina was re-chartered in 1830 and continued to transact business until 1871 when it was closed by the legislature. Another sound and conservatively managed state bank was the State Bank of Kentucky, which was chartered in 1833, and did a very successful business until 1877, when the state resigned its interest in the institution.

The State Bank of Ohio was patterned after that of Indiana and was chartered in 1845. It was a close imitation of the Indiana system (which was essentially that of the United States Bank) and was practically a board of control in charge of a system of banks. Each branch was required to deposit with the Board of Control 10 per cent. of the amount of its circulating notes, either in specie or in bonds of the State of Ohio or of the United States, as a safety fund for the protection of the holders of notes of any or all the branches. The Board of Control might invest any money belonging to the safety fund in the bonds of Ohio or of the United States or in mortgages on real estate in the county where the branch was situated, worth double the amount of the loan exclusive of buildings or other destructible property. Each branch was liable for the circulating notes, but not for the general debts, of the other branches. In case of the failure of any branch to redeem its notes, the Board of Control was to make an assessment pro rata on the other branches, and reimburse them as soon as the assets in the safety fund could be disposed of. The safety fund was then to be reimbursed out of the assets of the failed branch before any other creditors were paid. The State Bank of Ohio had thirty-six branches and was highly successful.[1] There were sound state banks, too, after 1837, in several other Western and Southern states. Wisconsin, for instance chartered the Wisconsin Marine and Fire Insurance Company in 1838. This company was practically a bank and did a successful business.

195. The important point to be noted in all of this banking experience before and after 1837, is that, although the notes were in all cases based on general commercial assets, there was a great difference in the results obtained. The sound banks of the Western and Southern states after 1837, had gained something from the experience of the earlier institutions. What differences there were between earlier and later banking lay almost wholly in the degree of ordinary business prudence observed. The enforcement of reasonable redemption requirements, the obligation that the capital on which business was done be a *bona fide*,

[1] See WHITE, *National and State Banks.*

and not a fictitious one, and that money be loaned only where there was some prospect of recovering it, were not peculiarities of any system of banking but were merely the demands made by sound business policy.

No special security to the note-holder was, or could well be, contrived, because of the circumstances under which early banking was carried on. The only safeguard was thus the kind of management in control of the business. But that with suitable restrictions and regulations, business could safely be done under the conditions of the times regardless of any special security to note-holders was amply proven by the experience of the Southern and Western states subsequent to 1840, when the speculative period had finally closed and the dangers of speculative banking had come to be more or less fully understood.

There were, of course, even during the later period a host of small and weak banks which in some states introduced great disorder into the currency by the issue of worthless notes. Many of them were worse, if anything, than the earlier banks whose history has previously been discussed. But, as already seen, their unsuccessful and dishonest career was not necessarily the result of their issuing notes on commercial assets. It was the nature of the assets acquired and the character of the business methods employed which then, as now, determined the value and soundness of the issues.

196. The loose methods of banking employed in the Western and Southern states could not have existed so long or in so extreme a form in a community more advanced in wealth, where it was necessary to have adequate facilities for exchange and for the safe keeping of current funds. Consequently the extravagances of the early banking mania of the West and South are not to be found in the older and more conservative portions of the country where business was more stable in its conditions. This was the case in New York. Indeed, the earliest period of banking in New York, extending from 1791 to 1818, shows no bank failures whatever. Many of the banks organized at that time passed through various changes, finally entered the national banking system, and still survive. Bank-

ing during this early period was unrestricted in its methods, circulation being unlimited and unguarded, yet no losses occurred.

Something of a change was introduced by the retirement of the First Bank of the United States from business. A new field for state banking was opened, and the tendency to expansion was aggravated by the suspension of specie payments in 1814. Gallatin estimated that, within the first fifteen months after the suspension, the state bank circulation increased from $45,500,000 to $68,000,000. It is not known just how this increase was distributed over the country, but some of it unquestionably was issued in New York. From 1812–1829 twenty-four new banks were chartered and eight failures occurred.

197. Thus, although the period had not been marked by the same serious disasters as had been the rule in the other states, enough experience was, however, obtained to show the desirability of adopting some system which should minimize the losses from failures. Inasmuch as about thirty of the existing bank charters were to expire between 1829 and 1833, the time was considered favorable for the introduction of a new system. A plan for a "safety fund" to be established by contributions from the banks and devoted to the payment of the obligations of failed banks was outlined in the Governor's message for 1829 and became a law on April 2 of that year. In case of a failure, creditors of the failed bank were to be paid so far as possible by the distribution of the assets of the bank in the customary way, after which the Comptroller was to meet whatever deficiency remained out of the "safety fund," which was then to be established by contributions from the banks not exceeding one-half of one per cent. annually upon their capital stock. In 1837 and the succeeding years the system was materially modified, the fund being finally limited so as to apply no longer to deposits, but solely to the notes of the banks, while these latter were to be limited to the amount of the capital and to be obtained only through the Comptroller. The essential point to be noted in connection with the system was that the notes were based on the general assets of the banks. And, though the failure in 1840–1842 of a number of banks which had become involved in

the speculative transactions of 1836–1839, threw exceedingly heavy losses on the fund, the experience under the system was such as to indicate that if it had started in the perfected form to which it was developed by subsequent legislation, there would have been not only no loss whatever to note-holders, but the average assessment upon circulation would have been considerably less than one-fifth of one per cent. per annum.

BOND-SECURED NOTES AND WILD-CAT BANKING.

198. The belief that political considerations influenced the granting of the charters to banks led in New York to a demand for a free-banking system, and the free banking act of 1838. It was not really opposition either to the principle of issues on commercial assets, or to the principle of the safety fund, which brought about the attempt to substitute some other form of security, but the desire for a political issue. This suggested the advocacy of some other sort of security, such as the deposit of bonds, to guarantee circulation. Consequently, the New York Free-Banking Act of 1838 authorized individuals and corporations to engage in banking and to receive from the Comptroller notes, unsigned, but otherwise ready for circulation, upon depositing with him stock of the United States, or of the State of New York, or other approved stock, or 6 per cent. bonds and mortgages on improved real estate worth double the amount of the mortgage.

Certain modifications, such as changes in the sort of securities permitted to be deposited (these being finally limited to United States, and New York state, stocks), provisions for double liability of shareholders, more perfect redemption, etc., were introduced, but the essential principle of the system remained practically unchanged. Under the safety-fund system 93 banks, with an aggregate capital of $33,551,460, had been organized. With the introduction of the bond-deposit system a somewhat larger number came into existence. By January 1844, 93 new banks had commenced business—though only 58 were then in operation. By 1850, the number in operation had increased to 113; by 1861, to 275.

Not to go into a comparison of the merits of the free-banking and safety-fund systems, it deserves notice that the advantages secured by the free-banking system were considerable. Although it at one time numbered several hundred banks among its members, the total losses to note-holders during the whole history of the system amounted to less than $400,000. During the later years of the system, losses were exceedingly small, and they became progressively smaller as the regulations governing the bond-deposit became more perfect; though with this movement toward greater security came greater inelasticity, and the disadvantages which have been noted elsewhere as attendant upon a bank currency based on the deposit of bonds.

When the national banking system came into existence, New York bank currency enjoyed so high a reputation for security that it commanded a considerable premium both over greenbacks and other bank-notes. Even after the new national system was fairly on its feet, the older state-bank notes continued to be preferred to those issued under the new system. It was to this and other similar circumstances that the tax of 10 per cent. imposed by the federal government on the notes of state banks, and intended to drive the older institutions out of existence as note-issuers, is to be attributed.

The New York systems, although far from perfect, thus furnished an immunity from failure so much greater than that previously obtainable, especially in the South and West, that they found numerous imitators when the sounder banking period set in subsequent to 1840. Of the two systems the safety fund was, however, much the less popular, either because of the early unfortunate experiences with it in New York prior to the complete development of the principle, or because of the responsibility laid by it upon the various banks for the debts of other institutions. It therefore found acceptance much less widely than the bond-security system.

199. Ohio, indeed, had, as already seen, established her state bank in 1845 on the safety-fund principle. Other banks in the state, however, were not compelled to contribute to a safety fund. By the side of the state bank, but wholly distinct and separate

from it, there was established a bond-deposit system for the regulation of such banks as might be established independently of the state bank. These banks were required, in order to receive circulation thereupon, to deposit bonds of the state or of the United States with the state treasurer to an amount not exceeding the paid-up capital of the bank. This was carried farther in 1851, when the so-called free-banking law went into effect. The state auditor was authorized to issue notes to persons depositing bonds of the United States, or of Ohio, to an equal amount, provided such issue should not exceed three times the paid-up capital. Under this law and subject to the surveillance of the state bank, the free institutions of Ohio carried on a fairly safe and responsible business.

200. The experience of other states, however, was not so fortunate. In 1851 Illinois adopted a general banking law on the New York model of bond-secured currency, but this was so far from keeping the currency at par that of ninety-three banks operating under it the currency of only five was redeemed in 1861 at par, the notes of the others being for the most part worth no more than from 50 to 60 cents.

Even Indiana, in the face of its fortunate experience with the state bank, was so moved by charges of political corruption and monopoly that it finally passed in 1852 an act providing for the issue of bond-secured notes similar to that of New York. "Under it wild-cat banking was developed to an extent then unknown. It was contemporaneous with the inflation in Ohio. 'The speculator comes to Indianapolis,' said the governor in 1852, 'with a bundle of bank notes in one hand and his stock in the other. In twenty-four hours he is on his way to some distant part of the Union to circulate what he calls a legal currency authorized by the legislature of the State of Indiana. He has nominally located his bank in some distant part of the state, difficult of access, where he knows that no banking facilities are required, and intends that his notes shall go into the hands of persons who will have no means of demanding their redemption.'"

Something like the New York system, or rather, a caricature

of it, came into existence in Michigan under the law of March 15, 1837. The organization of small, irresponsible and dishonest banks was stimulated. The securities which they deposited were practically worthless, and within two years from the passage of the act, the currency of the state was without value.

Iowa in 1858 passed a law providing for free banking with the issue of notes against deposited bonds. The notes were not to exceed in amount 90 per cent. of the bonds, and the bonds were to bear not less than 6 per cent. interest. A similar law had been passed by Wisconsin in 1853 whereby under a requirement of the deposit of bonds to secure circulation first-mortgage railway bonds were accepted. In neither of these states, however, did the plan meet with any success. In both, a part, at least, of the currency rapidly and heavily depreciated in consequence of the depreciation or worthlessness of the bonds deposited, with great resultant loss to the holders of notes.

201. Without going more at length into the history of the bond-secured bank-note mania, some general conclusions may safely be drawn. The fact that the earlier institutions had issued notes on the basis of commercial assets taken together with their unfortunate outcome and the worthlessness of their notes was supposed to indicate that such assets were defective as a basis of note-issue; and the partial success of the New York system of bond security for the notes was taken to imply a superiority in this method of note-issue irrespective of the various conditions and methods governing its operation in different places. In the case of the bond-secured notes as in that of those issued under a different system the whole question was, however, largely one of management and not entirely one of peculiarity in system. This was proven by the ill success of the various imitations of the New York system some of which have just been considered.

It cannot be too often repeated, in view of the constant tendency to regard a bond-secured currency as the only safe one, that the very worst of the early note-systems of the several states were secured by a deposit of bonds instead of by the general assets of the banks. It is only the preëminent

success of the national banking system in furnishing a secure currency that has given such wide acceptance to the notion that only through a system of bond-security can a safe currency be provided. The fact that United States bonds have always borne a high premium, and have therefore guaranteed the value of the notes issued upon them, has been confused with the system of bond-security itself.

It has been overlooked that commercial paper of the highest grade cannot fail to be also a satisfactory security, and that the question is one of the management of the institution, and not wholly one of the system under which it is operating. So far from furnishing a brake upon excessive or unnecessary issues, as it is currently supposed to do, the system of note-issues upon bond-security, before the War, rather tended to stimulate the issue of notes without regard to actual needs or demands for them. It was not necessary to issue the notes in the course of a general banking business, for the notion that they were perfectly secured by a deposit of bonds somewhere, made the general public far more ready to receive them; while the habit of looking upon the notes as efficient money enabled men, by going through the fiction of organizing a bank in some remote spot, to double their resources by investing in bonds and receiving back notes thereon, continuing all the while to receive the interest upon the bonds. Thus McCulloch relates a story of a man who purchased bonds to the amount of $10,000, took out notes on these bonds, used the notes in purchasing more bonds, on which he again took out notes, and so on until he had issued $600,000 of circulation, receiving in the meantime the interest upon the whole volume of bonds. Practically the same operation was carried on by many banks, and thus the bond-security plan, far from restricting, tended strongly to expand, the circulation. Such operations of course were possible only in view of the existing looseness of regulations and of redemption requirements. A suitable banking law would have rendered them quite impossible. But it was precisely such transactions which were typical of the times and of current ideas on banking.

From what has gone before it will be plain that in our

early experience there existed, especially in the South and West, many banks, with note-issues based on general banking assets, which resulted disastrously from insufficiency of capital, bad management, lack of public oversight and general supervision, and especially from the lack of proper methods of redemption; that, during the twenty-five years preceding the supplanting of the state systems by a national one, conditions and methods of banking had so far developed that the country had numerous sound and well managed banking systems in which the notes were based on general assets; and finally, that, as a matter of fact, it was not the systems of note-issues based on general assets, but those based on bond-security which, in this latter period, gave to the country the "wild-cat," "red-dog," and "stump-tail" currency which has naturally left so unfavorable an impression on the public mind.

NEW ENGLAND BANK CURRENCY, SECURED BY GENERAL ASSETS.

202. There is, however, one portion of our earlier banking experience to which more extended study should be given. This is embraced in the history of the banking systems of the several New England states which throws much light upon the questions involved in the recommendations herein made for a system of bank currency based upon general commercial assets. Indeed it is much more instructive, in one particular, than the experience of foreign banking systems alluded to above, or even than that of Canada; because it was a system composed of a large number of independent banks, mainly of small or only moderate capital, and, although not nominally a free-banking system, practically open to free competition. For, even though an act of incorporation from the legislature was required, this was usually a mere form, provided there was any real need for a new bank for which the requisite capital could be raised. The New England banking system deserves full consideration, because it throughout its entire history issued notes without specific security (as by the deposit of bonds) and without requiring investment in any particular form—that is, until superseded by the national banking system, it provided a system of notes

based on general assets, pure and simple, involving in the later years the issue of notes freely by over 500 banks.

203. From the legislative point of view there was no single system. Subject to the laws of five or six separate states, the details of banking regulation in these several states could not be otherwise than varied. For example, on the point of the limitation of circulation to a certain proportion of capital, the laws ranged from 65 per cent. in the later years in Rhode Island to 300 per cent. in Vermont.[1]

In some states an unlimited liability for both notes and deposits was enforced upon the officers in case of mismanage-

[1] In Massachusetts prior to 1812 it was customary in bank charters to limit the circulation to 200 per cent. of the capital; during the next thirteen years most of the charters imposed a limitation of 150 per cent. of the capital; nearly thirty banks chartered in the years 1825–1828 were limited by their charters to a note-issue of 100 per cent. of capital; while all banks chartered in Massachusetts after 1829 were permitted to issue notes to the amount of 125 per cent. of their capital.

In Rhode Island, prior to 1820, the banks were not limited in any way in their issue of notes; in that year the limit of the amount of capital was imposed. In 1837 the maximum note-issue of banks of $50,000 or less capital was limited to 75 per cent. of capital, banks of from $50,000 to $120,000 to 65 per cent., and larger banks proportionately less — banks of from $400,000 to $500,000 being limited to 20 per cent. In 1859 the limit was made 65 per cent. for all.

In Connecticut the limitation of note-issues in all of the earlier charters was 150 per cent. of the capital. In 1855 the limit was set at 125 per cent., and in 1858 further reduced to 75 per cent. of the capital.

In Maine, prior to 1831, the limitation was generally the same as in Massachusetts — sometimes 200, but more often 150 per cent. of the capital. In 1831 a general law was passed in accordance with which banks thereafter created were limited to a note circulation of 150 per cent. of the capital. In 1838, however, the maximum circulation was fixed at 100 per cent. of the capital for banks of $50,000 or less capital; 75 per cent. of the capital for banks of from $50,000 to $150,000, and 66⅔ per cent. for banks of more than $150,000 capital. In 1846, an act, evidently based in a way upon the English Bank Act of 1844, limited the circulation in excess of 50 per cent. of the capital to three times the specie held, and limited the total circulation to the amount of the capital, plus the specie held.

In New Hampshire, in 1837, the issue was limited to 100 per cent. of the capital, and it was provided that loans on the pledge of capital stock were to be treated as a diminution of capital, so far as the basis of circulation was concerned.

In Vermont, by a general bank act of 1831, the total debts of each bank were limited to the amount of its deposits and three times the capital. Inasmuch as the debts of a bank, exclusive of deposits, consist mainly of its circulating notes, this amounted to a limitation of circulation to three times the capital. In 1840 an act was passed limiting the circulation to twice the capital.

ment; in some instances the stockholders were liable to the amount of their stock for the ultimate payment of the notes; and in Rhode Island they were subject to unlimited liability.[1]

[1]According to the charters granted in Massachusetts, in 1811 and thereafter, in case of any loss or deficiency arising from mismanagement the stockholders were to be individually liable in their private capacities to an amount not exceeding the stock held by them; and upon the expiration of the charter, the stockholders were to be liable in their private and individual capacities, in proportion to stock held, for the payment of all bank-notes outstanding. These provisions were incorporated in the first general banking law in 1829. In case the bank should increase either its loans or other obligations, exclusive of deposits, beyond twice its capital, the directors at the time such excess was allowed were liable in their private capacities for the excess. An act passed in 1849 went farther, and made the stockholders of any insolvent bank individually liable in proportion to their stock, for the redemption of notes issued by such bank — without regard to whether the failure was due to mismanagement or not.

The earliest charters in Rhode Island specifically limited the liability of stockholders to the amount of the stock owned. The charters granted after 1818, however, imposed a general individual liability on stockholders in every case where the directors had violated the banking laws. The charters granted a few years later — for example, in 1828 — also required that before resort could be had to the estates of individual stockholders, the corporation should be first sued and the corporate property exhausted. From this point it was but a single step to absolute unlimited liability of stockholders, for the payment of notes, which was imposed in charters granted in 1833 and later, "provided that the corporation be first sued and the corporate property be first exhausted in the payment of the debts of the corporation."

In Connecticut, the bank charters granted after 1830 contained a provision to the effect that upon the failure of any bank the president, directors, and cashier were to be liable as joint and several debtors, if the debts of the corporation should exceed the limit specified in its charter. Otherwise, the stockholders do not appear to have been liable.

In Maine, the act of 1831 imposed upon directors and stockholders individual liability to the amount of stock held, in case of any deficiency arising from official mismanagement. And upon the expiration of the charter of a bank, the stockholders were held severally liable in the same manner for two years for the redemption of the bills outstanding.

In Vermont, a provision in the charter of one of the earliest banks projected (1817), to the effect that the stockholders should be liable in their persons and property for all demands against the bank which should not be paid in three days after due, proved so stringent that the stock was not subscribed until the provision was omitted. Later charters imposed individual liability upon directors under whose administration an excessive issue of notes should occur. Each of the directors was also obliged to give a satisfactory bond, usually for $8,000, conditioned upon the faithful discharge of his office. Later, the banks which had previously contributed to a safety-fund system were permitted to terminate such contributions on condition that the stockholders should give sufficient security, usually in the form of their bonds, to meet the obligations of the bank.

Connecticut, in all charters and under the general laws after 1830, provided that, in case of the failure of any bank, the holder of its notes of less denomination than $100 should have a first lien upon all the assets of the bank. Other states went so far in the same direction as to give the note-holders a special claim upon the stockholders in case of failure or the winding up of a bank. Massachusetts was the only state which incorporated no banks of less capital than $100,000. The other states each had a number of banks of $50,000 and Rhode Island had even smaller banks.

204. But while there was much variation in many of the details of banking legislation, there was one important particular in which the systems of all six states agreed. This was the fact that the issue of notes was based upon general commercial assets; and though efforts were made in several states to introduce, during the later years of the system, the feature of bond-security, they were without material result, and the New England banking system remained to the end a system authorizing the issue of notes freely, within designated limits, against the general assets of the issuing banks.

A natural result of this almost perfect freedom in the issue of notes was the constant supply of adequate currency for the needs of business. With hundreds of banks seeking employment for their capital, and each endeavoring especially to keep in circulation as large a volume of notes as possible (in order that thereby its earning power might be increased); with the number and capital of the banks so great that the maximum issue permitted them was many times the amount of circulation which the community cared to use, there was naturally no difficulty in obtaining an adequate circulating medium.[1]

205. Indeed, the question which most naturally arises is as to the means by which the supply was kept down to the needs of business — the forces tending toward its withdrawal when redundant, rather than the forces obviously tending toward its expansion. As will be appreciated when the principles underlying bank note redemption are fully understood (pp. 324–340), this

[1] For example, the figures below indicate the number, capital, and circulation of

mechanism was an effective redemption system, the development of which was as natural as it was important. The maxi-

the New England banks at various dates, together with an approximate statement of the maximum circulation which such banks were permitted by law to issue freely.

1835.

	No.	Capital	Circulation	Circulation permitted
Massachusetts	105	$30,400,000	$9,430,000	$38,000,000
Rhode Island	61	8,750,000	1,644,000	8,750,000
Connecticut	31	7,350,000	2,685,000	11,025,000
Maine	29	2,931,000	1,359,000	4,300,000
New Hampshire	25	2,555,000	1,347,000	2,555,000
Vermont	17	921,000	1,464,000	2,763,000
Total	268	$52,907,000	$17,929,000	$67,393,000

1840.

Massachusetts	115	$33,750,000	$9,112,882	$42,187,000
Rhode Island	62	9,880,500	1,719,230	5,000,000
Connecticut	31	8,806,204	2,325,589	13,209,000
Maine	49	4,671,500	1,224,658	3,500,000
New Hampshire	27	2,837,508	1,088,750	2,837,000
Vermont	17	1,196,770	1,099,784	3,590,000
Total	301	$61,142,482	$16,570,893	$70,323,000

1850.

Massachusetts	126	$36,925,050	$17,005,826	$46,156,000
Rhode Island	63	11,716,337	2,553,865	6,000,000
Connecticut	37	9,152,801	4,888,029	13,729,000
Maine	32	3,248,000	2,654,208	3,050,000
New Hampshire	22	2,203,950	1,751,096	2,203,000
Vermont	27	2,197,240	2,856,027	4,395,000
Total	307	$65,443,378	$31,709,051	$75,533,000

1860.

Massachusetts	178	$66,482,050	$25,012,745	$83,102,000
Rhode Island	91	20,865,569	3,558,295	13,562,000
Connecticut	74	21,606,997	7,702,436	16,205,000
Maine	68	7,506,890	4,149,718	5,765,000
New Hampshire	51	4,981,000	3,332,010	4,931,000
Vermont	44	3,872,642	3,784,673	7,745,000
Total	506	$125,315,148	$47,539,877	$131,310,000

mum note-issue permitted being far in excess of the aggregate amount of currency which could be kept outstanding, it was directly to the interest of each bank to secure for itself as much of the field as possible, and therefore to pay out its own notes rather than the notes of its neighbors, thus making a field for its own circulation by withdrawing from the channels of trade and presenting for redemption the notes of other banks which came into its possession. In this way there was developed, as elsewhere explained (pp. 331–334), the Suffolk Bank system of current redemption, which constantly restricted the circulation to needs of business by removing the excess as soon as the least redundancy occurred. In this way, also, by the very activity of the redemption system, the currency was constantly purified, as it was impossible for any unsound bank to long exist.

206. To these two features—(1) perfect freedom in the issue of notes, within limits which would never be reached by the demand for currency, and (2) an effective system of current redemption—New England owed much of the reputation which her currency enjoyed. For this currency not only possessed such perfect responsiveness to local demand that it furnished an economical and effective medium of exchange to all New England, but its unquestioned security and its reputation for certain and immediate convertibility rendered it a most satisfactory currency at a distance from its place of issue. Even in the West, it was estimated by Senator Sherman in 1863, $40,000,000 of the currency of the Eastern states was in circulation, owing to the disordered state of the currency furnished by the so-called "free banks," issuing notes on the deposit of bonds.[1]

It is not intended to suggest that there was not in the early years considerable illegitimate banking in New England and consequent failures and losses. These failures, however, were due to causes which it was later found quite possible to remedy—especially to the establishment of banks without a *bona fide* paid-up capital, and to the organization of banks for speculative purposes. These failures, however, were neither numerous nor important

[1] See his speech in the Senate on January 8, 1863.

when compared with the banks which did not fail, and the losses to note-holders which resulted even in these early years were such as would have been met by a small mutual guaranty fund. So, too, the very few failures in the later period, 1840–1864, resulted in no losses which a very modest insurance fund would not have covered.

ELASTICITY.

207. By the term "elasticity" as applied to a currency is meant the capacity to expand and contract with an increase or decrease in the demand for it—that is the adaptation of currency supply to currency need. Indeed, elasticity consists quite as much, if not more, in the capacity to contract as to expand.

Entirely apart and distinct from the occasional emergency demands for currency growing out of extraordinary or panic conditions, which it is not intended to discuss at this point, there are numerous variations in the demands for currency at different times in the year, arising from methods of doing business, and especially from the ebb and flow of industrial activity at different seasons. Where wages are paid weekly, for example, it is evident that there will naturally be a greater demand for currency, or a medium of exchange, on Saturday night and early in the week, than there would be a few days later when the amounts received in wages at the close of the previous week had been largely spent and returned to the banks in the stream of deposits from local tradesmen. If wages were paid only at monthly intervals, the variations on this account would be even greater. The amounts then required to make payments on the last day of each month, or the amount which the workmen of that community might hold on the evening of that day, would be much more than the amount of currency which would be in the hands of these same workmen four weeks later. In other words, there would be in such a community, material monthly fluctuations in the demand for media of exchange, due to the methods followed in making payments for labor.

Similarly, the practice of paying rents, settling accounts, etc., at monthly or quarterly intervals, wherever it prevails, leads to a considerable increase in the demand for media of exchange at certain periods, and a falling off at other periods; while the practice of paying dividends on stocks, and interest on bonds or

on mortgages at definite quarterly, or semi-annual, or annual intervals, which has become so marked in the development of these forms of investment, greatly intensifies the increased demand for some means of payment at such dates.[1]

But, perhaps the most marked instance of this periodically increased demand grows out of the marketing of the crops. Manufactured goods are, in general, capable of being marketed continuously throughout the year, and it is the aim of manufacturers so to adjust their production that this end will be secured. In the case of agricultural products, however, the circumstances are otherwise. The greater part of our immense agricultural crops is marketed within a period of three or four months. From the necessity of placing such large amounts of these products on the market at fixed recurring periods, arises one of the most marked seasonal demands for an increased medium of exchange.

208. Some of our ordinary media of exchange possess the characteristic of elasticity—the capacity of expanding and contracting with these varying needs of business—to a much greater

[1] *The Commercial and Financial Chronicle* has furnished to the Commission an estimate of the payment of interest and dividends on railroad bonds and stocks in the United States in each month, from which it appears that the necessity for payments on account of these items alone, is more than five times as great in certain months as it is in others, and vastly greater on the first of each of such months than on any other date. The estimate is as follows:

	Bonds	Stocks	Total
January	$ 54,000,000	$ 13,000,000	$ 67,000,000
February	9,000,000	5,500,000	14,500,000
March	11,500,000	6,500,000	18,000,000
April	24,500,000	10,000,000	34,500,000
May	19,500,000	6,000,000	25,500,000
June	15,000,000	4,000,000	19,000,000
July	54,000,000	13,000,000	67,000,000
August	9,000,000	5,500,000	14,500,000
September	11,500,000	6,500,000	18,000,000
October	24,500,000	10,000,000	34,500,000
November	19,500,000	6,000,000	25,500,000
December	15,000,000	4,000,000	19,000,000
Total	$267,000,000	$ 90,000,000	$357,000,000

degree than others. The deposit-currency by means of which the largest part of our commercial transactions is effected is particularly elastic. It expands and contracts automatically with every change in demand. If additional currency is wanted in a strictly commercial community for any of these extrordinary demands — by a railroad, for example, to provide for the payment of interest on its bonds — it is secured from an existing deposit, or by means of a loan granted in the form of deposit-currency against which checks for the interest are drawn; and to the extent to which those to whom the interest is paid likewise make use of the check and deposit system, the whole transaction is carried through without the least trouble or friction. This currency expands freely and automatically to meet any real need, and contracts as easily as it expanded when it is no longer desired.

209. But manifestly not all these needs which have been suggested for increased supplies of a medium of exchange can be met by an expansion of the deposit-currency. Whether or not any particular demand can be so met, will depend largely upon the business habits of the community and the commercial development of the individuals or the character of the transactions.

In the payment of weekly wages, for example, the deposit-currency is very rarely used, even in the more highly developed commercial centers; either coin or some form of note-currency is required. But in this case the periods are so frequent that the demand may be said to be practically constant, as the necessity of providing for it is always present, and there is little opportunity for making any other use of the funds required for this purpose in the brief intervals when they are not actually in use.[1]

The parties to monthly payments on account of wages, rents and accounts, though still requiring a large use of the note-currency, do make a larger use of the deposit-currency than the classes just referred to. And when the quarterly and half-yearly settlement of accounts, rents, dividends and interest are

[1] It is worthy of note, however, that when the banks are able to provide freely for this demand by their note-issues, so that they need make no provision for it in advance, evidence of this weekly demand does appear in the expansion to meet it.

considered it is found that in all communities of high commercial development the deposit-currency is the form most used. And, as already suggested, so far as this particular medium of exchange is used, there is no ground for complaint on the score of inelasticity. The increased demands for currency arising from these transactions are in fact met by so automatic an adjustment of the supply that little visible evidence is left that there has been any fluctuation in the demand.

210. The most marked variations in demand for currency in this country occur in connection with the annual marketing of the crops. Owing to the fact that the agricultural classes involved in these transactions do not use the check and deposit system to any great extent, this demand is largely for a note-currency. The farmer on selling his crops may indeed receive a check in payment; but as he and a large part of the community with which he deals do not find the check and deposit system convenient, he is not satisfied with that sort of payment. He cashes the check at the bank, or through some merchant, and thus secures the form of currency which he requires. If he cashes it with a merchant, a portion may be merely offset against his account at the "store" where he deals, and to that extent the demand may be satisfied without resort to note-currency. But not so with the balance; for that he must have coin or notes. Some of this currency is used at once in settling

In April 1875, the Scotch banks made daily exchanges of notes, and it appears from the returns showing their notes outstanding at the close of each day, after giving effect to the daily exchanges, that there was a noticeable increase on Saturdays, in the circulation of notes under £5 ($25), due to the taking out of notes for payment of wages, etc. The return, as summarized, was as follows:

AVERAGE AMOUNT OF NOTES IN CIRCULATION AFTER EFFECTING DAILY EXCHANGES.

Average of	£5 and upwards	Under £5	Total
Four Mondays	£1,025,335	£2,168,817	£3,194,152
" Tuesdays	1,062,742	2,148,009	3,210,751
" Wednesdays	1,089,649	2,116,899	3,206,548
" Thursdays	1,064,975	2,102,608	3,167,583
" Fridays	1,038,097	2,122,762	3,160,859
" Saturdays	1,019,152	2,213,037	3,232,189

outstanding accounts, and thus gets back to the bank almost immediately through the deposits of the tradesmen. To this extent the demand is of short duration. The rest of the currency is paid out from time to time during the fall and winter for "help," and in the purchase of the winter's supplies, or is held in cash in many cases to meet spring payments on a mortgage. The net result is that the average farmer has in his possession for the three or four months after he has sold his crop, a much larger sum of money or notes than during the three or four months immediately preceding. Taken in the aggregate, this makes a largely increased demand for currency in the form of notes in the fall season of the year.

The question which most naturally arises upon noting these varying demands of currency is as to the way in which they are in practice met, both here and elsewhere.

211. In England the deposit-currency has perhaps attained its greatest perfection. Through the extension of the system of branch banks into every corner of the land, banking facilities have been placed close at hand and the community familiarized with their use. Owing to the extreme elasticity of this medium of exchange, therefore, the variations in demand meet with an automatic and immediate response. The following table and dia-

LONDON CLEARING HOUSE EXCHANGES ON THE FOURTH OF EACH MONTH.

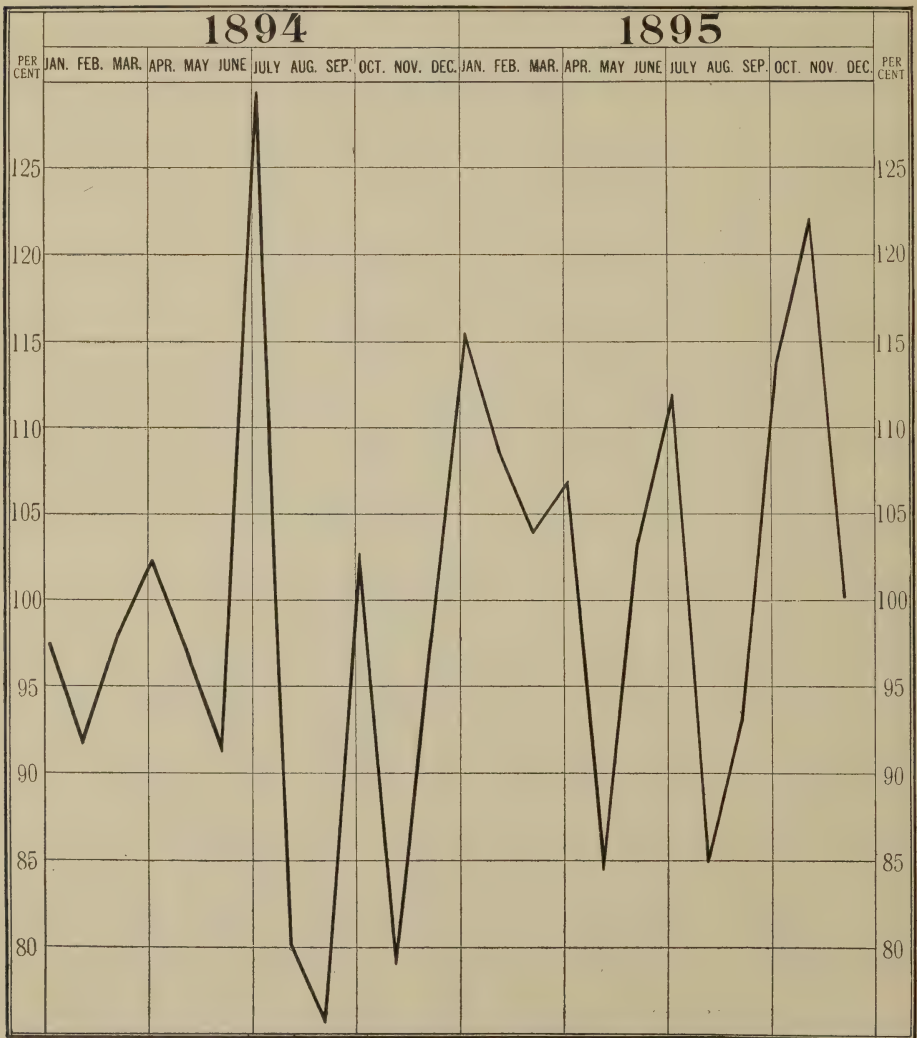
[£22,700,000 = 100 per cent.]

	1894		1895	
	Amount	Per cent. of average	Amount	Per cent. of average
January	£22,132,000	97.5	£26,232,000	115.5
February	20,833,000	91.7	24,657,000	108.6
March	22,235,000	97.9	23,595,000	103.9
April	25,510,000	112.3	24,279,000	106.9
May	21,991,000	96.8	19,183,000	84.4
June	20,708,000	91.2	23,441,000	103.2
July	29,387,000	129.4	25,425,000	111.9
August	18,233,000	80.3	19,294,000	84.9
September	17,156,000	75.6	21,162,000	93.2
October	23,323,000	102.7	25,857,000	113.9
November	17,940,000	79.0	27,733,000	122.1
December	22,099,000	97.3	22,752,000	100.2

gram, illustrating the exchanges of the London Clearing House upon the fourth of each month, indicate how extreme are the fluctuations in demand for media of exchange, which are thus satisfied:

CHART III

LONDON CLEARING-HOUSE EXCHANGES.



Nevertheless, in the country districts, even of England, there are periodic demands for other forms of currency; and the fluctuations in the note-issues of the country joint-stock and private banks give evidence of these seasonal demands to the extent to which they respond to them. The amount of such issues is not large, usually less than $10,000,000, but the fluctuations within this limit indicate considerable elasticity.

The following diagram[1] shows the course of the bank issues of the English Private and Joint-Stock Banks in 1894 and 1895. There appears a distinct increase of the circulation at quarterly intervals — especially marked in April and October. This will be recognized as being in response to the demand for currency in the form of notes growing out of the payment of interest and dividends to or by those who do not make use of the deposit system:

CHART IV

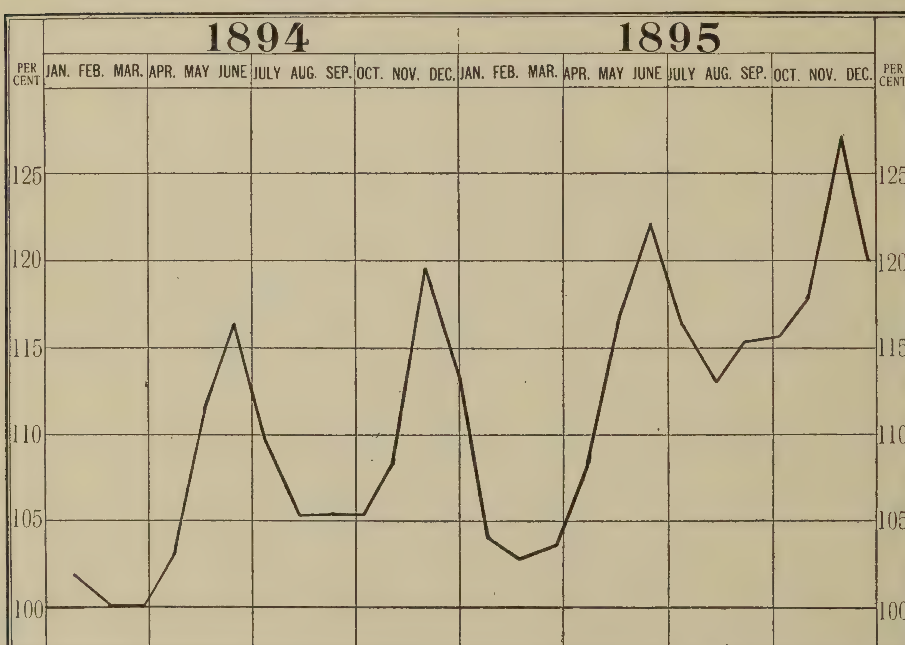
NOTE-ISSUES OF ENGLISH PRIVATE AND JOINT-STOCK BANKS.

[1] In the preparation of this diagram and those which follow the circulation at weekly or monthly intervals has been ascertained and the amount for each date compared with the lowest amount reported for the two years in question. The amounts indicated on each diagram are thus percentages of the lowest circulation for the banks in question during the years 1894 and 1895.

212. In Scotland, both deposit- and note-currency have been highly developed; but on account of the greater freedom left for the expansion of the notes, that form of the medium of exchange occupies a much more important field than in England. But the nature and extent of the demand for varying supplies of media of exchange are not materially different. The extent to which note-currency meets these fluctuations is shown by the following diagram:

CHART V

NOTE-ISSUES OF BANKS OF SCOTLAND.



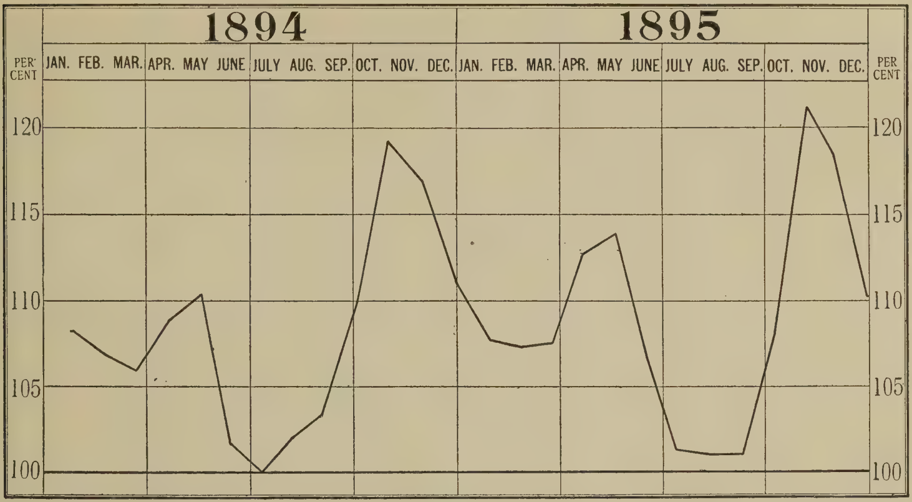
Practically the only difference between this showing and the preceding one is that the slight January and July upward movements in England do not appear in Scotland, while the two marked semi-annual movements are slightly later — that in the autumn being the more pronounced.

In Ireland, the movement differs from that in Scotland in

indicating a more prominent demand for note-currency in the autumn, growing out of crop movements among an agricultural class less conversant with the deposit system. The movements are also slightly earlier — the maximum being reached in April and October rather than in May and November.

CHART VI

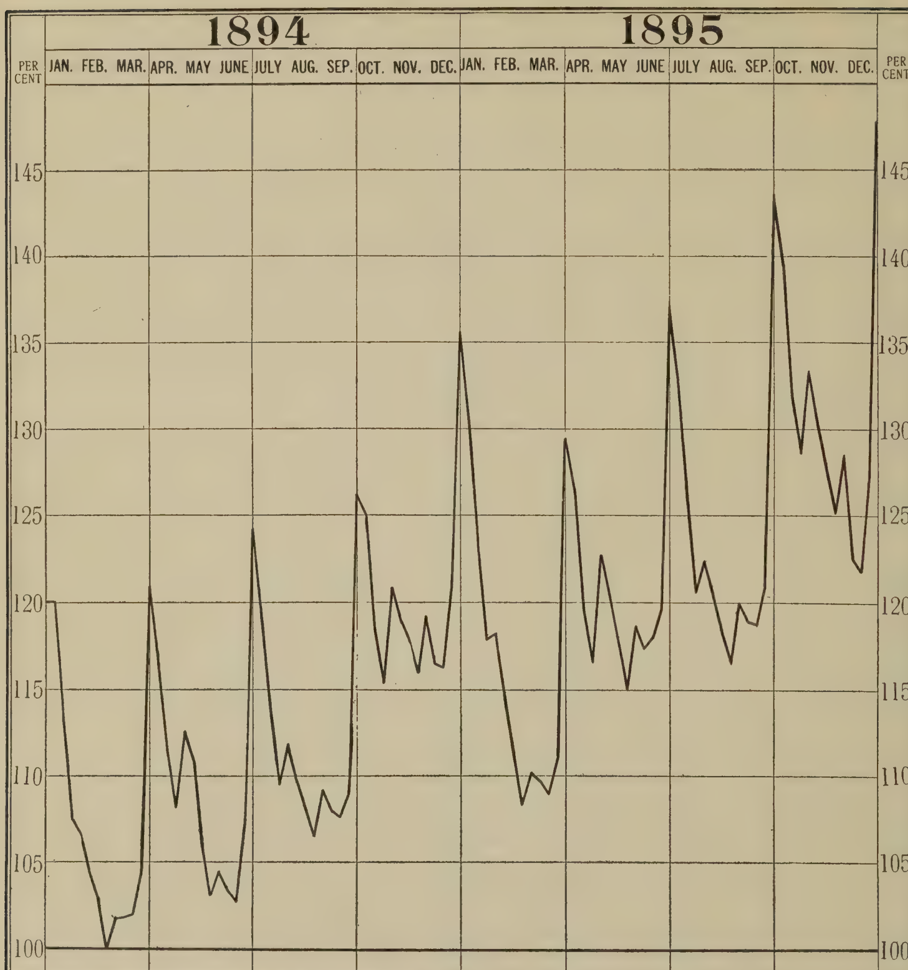
NOTE-ISSUES OF BANK OF IRELAND AND IRISH JOINT-STOCK BANKS.



213. In Germany, the absence of the development of the check and deposit-system has left the burden of increased demand to fall almost exclusively on the note-currency. The result is a much more marked fluctuation in the supply of that particular medium of exchange than was exhibited in England, Ireland or Scotland, where the extreme elasticity of the deposit-currency permitted the heaviest demands to be met without the use of notes. It will be noticed that in addition to the movements in January, April, July, and October, resulting from the settling of dividends, interest and other quarterly payments, there are well defined monthly movements arising from the requirement of more currency in the settlement of accounts, rents, salaries, etc., at the end of each month.

CHART VII

NOTE-ISSUES OF THE IMPERIAL BANK OF GERMANY.



214. In Canada, the characteristic, as shown by the diagram below, is a single annual movement of currency to meet the demands for "moving the crops." The deposit-system is far enough developed in all the commercial centers — and even to a large extent throughout the rural communities, where the

extension of branches has done much to stimulate its growth — to permit the usual fluctuations in demand other than that for "moving the crops" to be fully met without the necessity of increasing the note-issues. But in the fall season, owing to the circumstances already alluded to, the demand in Canada, as in this country, is for a note-currency; and the diagram below shows how it is promptly and regularly met by the expansion of the circulation of the Canadian banks.

CHART VIII

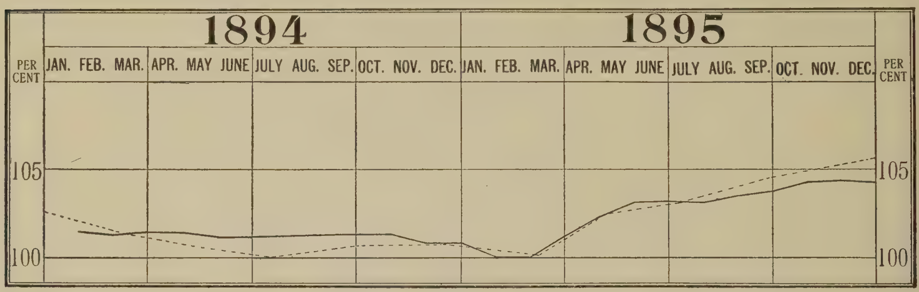
NOTE-ISSUES OF THE CANADIAN BANKS.

215. The currency problem in the United States is mainly an agricultural one, for the reason that the commercial centers are already supplied with a currency of the maximum elasticity— namely, deposits. In the distinctly agricultural sections, however, practically the same demands for currency exist as in Canada — the chief characteristic of which is an urgent need in the autumn, at the time the crops are being marketed. Owing, however, to the inelasticity of our bank-note currency, as elsewhere explained (pp. 225–230), the demand does not find an automatic

response in our circulation. That the demand exists, however, is evidenced in several ways—partly through its effects, and partly through the means which are taken to satisfy it.

CHART IX

NOTE-ISSUES OF THE NATIONAL BANKS OF THE UNITED STATES.



The data given in the heavy line are the statements of outstanding circulation ordinarily quoted. They include, however, notes still held in the vaults and tills of the issuing bank; and, to the extent that this amount varies at different seasons of the year, this puts the circulation on a different basis from the others described and thus vitiates comparison. Fortunately we have the required data given on the same basis as in the other systems for the five dates in each year for which reports are made by the Comptroller of the Currency. This information is platted on the diagram in the broken line, and is such as to indicate that even if we had similar figures for weekly or monthly periods the elasticity shown would not be materially greater.

There is, for instance, a well-defined annual movement of currency out of New York and the financial centers. This takes place regularly every year, commencing usually in July and August and continuing until well into December. The net movements of money between New York and the interior are reported each week in the financial journals. From these it appears that during January and February the country is usually emptying its idle money into New York; in March there is a slight reaction, lasting only a few weeks, and from May till August, the tide again flows strongly toward New York. With August the turn comes, and the movement to the interior is again strong and continues until December.

This method of meeting an increased demand for currency in certain sections, mainly by withdrawing supplies from other

districts naturally has its effects on the currency conditions of the places which are called upon to furnish the supplies of currency. It is so in the case of New York. With the commencement of the outward currency movement, the surplus reserves of the New York City banks begin to decline. The usual period of currency shipments West and South is the period of diminishing reserves, and in December, as the current turns, the reserves again fill up. The rates of interest on call loans, it is well understood, vary inversely with the surplus bank reserves. When reserves are low the rate of interest is sure to be high, and when reserves are above the normal, the call loans are again made at low rates of interest.[1]

There is another way in which the efforts of the banks of this country to meet the enlarged autumnal demand in rural communities is manifested. This is through the operations of the banks in those sections. That the demand is for note-currency, is a fact well known to the bankers. In consequence, the affairs of each bank are as far as possible so shaped as to enable it to respond. In default of any opportunity for the rural banks to expand their issues, the first source of supplies of currency for this purpose is, of course, their own local reserves. These are at the commencement of the autumnal demand usually large enough to permit a considerable reduction, without reaching the danger point. The next step is the securing of additional currency from their reserve agents in the cities by withdrawing a portion of their balances on deposit; and a final step is the securing of currency in the shape of loans from city bank-correspondents mainly in the form of rediscounts.

This is reflected in the national bank reports by the following figures showing the amount of money borrowed by national banks in the cotton states — North Carolina, South Carolina, Georgia, Alabama, Mississippi, Louisiana, Arkansas and Texas, at dates approximating March 1, and October 1, in each year since 1890:

February 28, 1890, - - - - - - -	$ 2,181,000

[1] See especially the data in the article entitled "Do We Want an Elastic Currency?" by F. M. Taylor, in the *Political Science Quarterly*, Vol. XI., pp. 133–157.

October 2, 1890,	$14,480,000
February 26, 1891,	5,548,000
September 25, 1891,	15,553,000
March 1, 1892,	3,621,000
September 30, 1892,	10,849,000
March 6, 1893,	4,725,000
October 2, 1893,	18,351,000
February 28, 1894,	1,941,000
October 2, 1894,	11,111,000
March 5, 1895,	2,761,000
September 28, 1895,	10,803,000
February 28, 1895,	4,016,000
October 6, 1896,	11,098,000
March 9, 1897,	1,385,000
October 5, 1897,	9,611,000

216. In practically every other country this normal seasonal demand for an enlarged note-currency is met by a prompt and natural expansion of the volume of bank notes. In our own country it finds in our national-bank issues—as elsewhere explained, and as will appear by comparing the last diagram with those which have been previously given—an absolutely unresponsive medium. In part, the demand is met by withdrawals of supplies from other sections; in part, by resort to inconvenient methods of doing business. But, in any case, the problem of elasticity is one which Secretary Windom well characterized in his report for 1890 in the following terms:

In my judgment the gravest defect in our present financial system is its lack of elasticity. . . . . The demand for money in this country is so irregular that an amount of circulation which will be ample during ten months of the year, will frequently prove so deficient during the other two months as to cause stringency and commercial disaster. The crops of the country have reached proportions so immense that their movement to market, in August and September, annually causes a dangerous absorption of money. The lack of a sufficient supply to meet the increased demands during those months may entail heavy losses upon the agricultural as well as upon other business interests.

In the entire treatment of this topic the attention has been confined to those normal changes in the supply of currency which

are responsive to certain normal fluctuations of demand. In these ways the question of elasticity most intimately concerns our currency system, because they are involved with our ordinary commercial transactions. There is, however, another field in which the elastic character of a currency may be still further tested. This is in the midst of a panic, or some extraordinary financial or monetary stringency, when the ability of the banks to allay apprehension through their power of furnishing an adequate supply of currency may be a matter of great importance. This, however, is a matter quite distinct from the responsiveness to the changes in normal business demands which constitute the elasticity here discussed, and will therefore be considered in a different connection. (See pp. 367–368.)

REDEMPTION.

217. Elasticity, as has been explained under the preceding section, involves two things:

(1) Expansion with increased demand for currency.

(2) Retirement of this currency as soon as the need for it has passed.

The supply of the currency is always properly adjusted to the demand for it by the mechanism of redemption. The ordinary deposit-currency, as has been shown, is preëminently elastic; but it is the inelasticity of the note-currency which produces the most troublesome and dangerous conditions.

It has been explained elsewhere (see pp. 231–233), why a bank note-currency resting on ordinary commercial discounts is able to expand readily and automatically with an increase of business requiring additional currency. The placing of the issue of currency upon such a basis, and the removal of those restrictions which make it at present unprofitable, will, in all probability, induce sufficient expansion to meet the needs of commerce. But to secure real elasticity it is not enough that the circulation should expand when the necessities of commerce require more currency; it is just as essential that it should promptly contract when those necessities have gone by. Under the head of redemption it is proposed to consider the mechanism by which this withdrawal of any excessive currency is enforced and by which the supply of currency is adjusted to meet the lessened demands.

The various suggestions for the alteration of the basis of our bank currency which have recently been made, have included numerous warnings against the dangers of over-issue, unless some means be devised to force the withdrawal of bank currency in excess of business needs. For this purpose it has been proposed to tax such currency so heavily that it could not be issued under ordinary conditions; to require the withdrawal of certain portions within four or six months; to limit the aggregate issues

to a certain amount, etc. All this anxiety for something to force retirement of a redundant bank-currency has arisen from a failure to appreciate the important function of redemption and the way in which, when freely developed, it serves as a constant regulator of the volume of the currency.

Nor is it hard to discover the reason for this. For the last thirty years we have had in the United States a bank-currency system in which there was almost no inducement to the development of a system of current redemption of notes. In consequence of taxation and restriction, but more especially because of the requirement for investment in bonds, there is no profit unless the circulation can be kept outstanding practically all the time; there is a positive loss in diverting capital to the issue of notes to meet a temporary demand of a few months duration. The consequence is, that banks in general take out no more notes than they can hope to keep permanently in circulation. There is, therefore, little or none of the incentive to a bank to present notes of other banks for redemption, that arises from the desire to create a vacuum to be filled by its own notes, for the profit thereon.

218. The whole process is merely an application by each bank of a very simple principle, the key to which is self-interest. Every banker who is free to issue additional notes without inconvenience or cost, has a decided interest in withdrawing from circulation the notes of another banker in order to make room for his own. This is the force back of redemption. Under a system where every bank was free to issue notes up to, say, 80 per cent. of its capital — as free as it would be to receive deposits — it is inconceivable that a bank whose issues were only 50 per cent. of its capital, upon receiving on deposit the notes of another bank, would pay them out again. Why should it? For any purpose for which a bank-note will serve — such as the cashing of a check, or the discount of a note, or the grant of a loan — its own notes can be used without cost to itself. So it naturally pays out its own notes, and presents the others for redemption, thus adding to its cash reserve.

Under such a system a banker, whose issues had not

approached the 80 per cent. limit, would no more think of allowing the notes of another bank to remain idle on his hands, or to be paid out again where his own notes could be used, than he would today of holding checks on that bank just because he considers them good, or of voluntarily or gratuitously transferring to such bank a portion of his customers' deposits. Such an act would in fact be a loan without interest to that other bank for the length of time the note was held, or (being put into circulation) for the time it might be expected to remain outstanding and under a system of comparative freedom of note-issue, would be the grossest disregard of business principles.

It is in this way that under any banking system sufficiently liberal in terms to permit adequate expansion, there is sure to be sufficient incentive to retirement to keep the outstanding volume of note-issues down to the needs of business. In other words, there is a very close connection between the ease or difficulty of issuing notes and the activity and efficiency of the redemption system. The development of the latter is dependent almost entirely upon the existence of a system of issues sufficiently liberal to permit expansion even beyond the needs of business; for it is only then that the competition of the banks for a legitimate profit will furnish the incentive which lies behind a system certain to withdraw redundant currency. When the notes are no longer wanted by the public for the convenient transaction of its business, they will be deposited in some bank, and as soon as they are thus deposited they will be put on the road to redemption and retirement through the operation of the principles described above.

219. The function of a system of active note-redemption as a regulator of the character of the currency as well as of its volume, also demands consideration. It is only when the value of a promise to pay money on demand is being constantly put to test that there exists no danger of its depreciation. And it is through redemption, in the case of a bank-currency, that this test is made. Where no real redemption exists, there may be danger of expansion, since the most powerful agency in keeping down the supply of currency to the amount demanded, and

keeping its character up to the standard, is absent; but where the notes are being constantly tested by their presentation for redemption, none can be kept in circulation which are not up to the standard, and no more can be issued than the public wishes to use. And to place impediments in the way of quick redemption is practically to affect the value of the currency—to lower it, to some extent, from the standard to which it should conform.

One of the most noticeable features developed in the banking experience of New England, with its effective system of bank-note redemption, was the recognition that no bank could do business which was not able to meet its notes promptly, and that no bank, because of the continuous presentation of notes for redemption, was able to extend its circulation beyond the point of safety. It was largely to this fact that New England owed that superiority which its currency maintained in the years before the War.[1]

[1] The following extracts from reports of Bank Commissioners in Connecticut and Maine, during the period covered by the Suffolk Bank Redemption System, are instructive upon this point:

"The banking system in New England . . . . stands undeniably above any other in the United States; and the world can scarcely show a better system . . . . In the opinion of your commissioners, one important step is that of sustaining and giving greater efficacy to the arrangement for redemption, now known as "the Suffolk Bank System." This method has been salutary in its influences, and has tended greatly to produce a healthy state in all our Connecticut and New England banks . . . . The extent of failures that would have occurred, with their disastrous results, but for this conservative and regulating power, may be judged of, somewhat, by contemplating the present state of monetary affairs throughout the South and West.

The currency of this state is of the first order, and cannot be improved, being equal to gold and silver. This is strong language, we admit, yet perfectly true; for every bill-holder can, on demand, convert his bills into coin." . . . —*Report of the Bank Commissioners of Connecticut*, May 1841.

". . . . It gives your commissioners great pleasure to be able to say that not one bank failure has occurred in this state; and still more, that there has not been a solitary case of suspension, nor of inability to redeem their bills at the Suffolk Bank, where about one-eighth of the circulation is redeemed weekly. And this shows satisfactorily that, should the emergency arise, they are able to redeem their entire circulation in the short time of eight weeks, though such a severe test of their soundness is by no means to be apprehended." . . . —*Report of the Bank Commissioners of Connecticut*, May 1842.

"The system of redeeming their notes at the Suffolk Bank is still continued by

Such, then, are the principles underlying the question of redemption of bank currency. It will be interesting to examine how far the practice in different countries is in agreement with the principles which have been laid down above, and to what extent conditions peculiar to the United States have produced other results.

CANADA.

220. In Canada the banks are left perfectly free to issue notes as they may think best up to the limit imposed by law—the par of their capital. Inasmuch, however, as the capital of the banks of Canada is over $60,000,000, while the note circulation required, even in the time of greatest demand in the fall season, is rarely $40,000,000, there is always a considerable margin between the

the banks in this state, with two or three exceptions; and as every bank is under the necessity of redeeming an amount nearly equal to its whole circulation every sixty days, it operates as a check to excessive discounts and over-issues, and no doubt has exercised a salutary influence upon the paper currency of New England. Although such a test of the soundness of banks is not infallible, still your commissioners have advised those banks which now redeem only at their counters to adopt it, thereby producing uniformity of action throughout the state." . . . —*Report of Bank Commissioners of Connecticut*, May 1843.

"It is believed to be impossible for the banks, so long as the system of frequent redemption at the Suffolk Bank is continued, to sustain as large a circulation as they are legally entitled to, unless it is those of small capital.

"This system of redemption your commissioners believe to be a very salutary one for the banks and the people. It serves as a check upon excessive issues; and so long as the banks promptly meet their redemptions at that point, their bills will not be liable to be discredited." . . . —*Report of the Bank Commissioners of Connecticut*, May 1846.

"The 'Suffolk System,' though not recognized in our banking law, has proved to be the great safeguard to the public. Whatever objections may exist to this 'system' in theory, its practical operation is to keep the circulation of our banks within the bounds of safety. No sound bank can have any well founded reasons for refusing to redeem its bills in Boston; and a bank that is not sound cannot long do business under that system, and ceases to be in good credit when it is 'thrown out at the Suffolk.'" . . . . —*Report of the Bank Commissioners of Maine*, 1857.

"There is no difference of opinion among the officers of the banks of this state, or among practical business men, that the system should be maintained in its integrity, whatever agent or agents in Boston may be employed for doing the business. The redemption of their bills in Boston by all the New England banks has become indispensable to securing an extensive par circulation for their currency, and in facilitating the transaction of business." . . . —*Report of the Bank Commissioners of Maine*, December 31, 1858.

amounts actually issued by the banks as a body and the limits which the law prescribes. Ordinarily, too, this same latitude exists in the case of any individual bank, and so long as it does exist, the practical working of redemption is the same as that suggested above. Each banker, as the only means by which the field can be kept clear for his own circulation, regularly sends in for settlement the notes of his neighbors precisely as he does their checks. If the notes are those of a bank having a branch in the same town, he sends them to that branch for settlement; if not, he sends them to the most convenient town containing both a branch of his bank and a branch of the bank whose notes he wishes to present for redemption. Except in those occasional instances where the legal limit of circulation has been reached, the paying out by one bank of the note of another bank is regarded in Canada as an instance of grossest disregard of business principles. The result of this universal attitude of the Canadian banks in constantly insisting upon daily redemption of notes is that any issue beyond the current needs of business soon reaches the tills of some bank, by which it is promptly presented for redemption.[1]

[1] D. R. Wilkie, Esq., General Manager of the Imperial Bank of Canada, replying to the inquiries of the Monetary Commission, writes as follows:

Toronto, Can., October 25, 1897.

I have much pleasure in replying to your inquiries regarding the system of redemption of bank-notes in operation in Canada:

1. "Are the notes of the Canadian banks presented to one another for settlement through the clearing-houses or independently?"

Answer: The notes are presented to one another for settlement through the clearing-house where such exists — (clearing-houses are in operation at Montreal, Toronto, Halifax, Hamilton, Winnipeg, and St. John); — independently, where no clearing-house exists and where the issuing bank is represented.

2. "To what extent in either case are balances usually paid in gold or Dominion notes?"

Answer: Altogether in Dominion notes — no gold is ever used in settlement of balances under existing conditions. Settlements between banks outside of clearing-house points are by mutual arrangement frequently made by draft on a financial center.

3. "In the case of a bank situated as yours is, what is the average life of the notes? In other words, how many times in the course of a year is the average circulation issued and taken in again?"

Answer: The average circulation is, I think, about equal to the amount paid out

It should be noted in this connection that the redemption involved is of the nature of a clearing-house transaction. It is very rare that the notes of a bank are presented to it for redemption in actual coin. For as the notes are thoroughly secure, the public has no reason to prefer gold or a Dominion note to the note of a Canadian bank. So that the only redemption is that forced by the banks themselves ; and this, where there are clearing-houses, takes place through them, and elsewhere by exchanges between individual banks — in which latter case balances are settled sometimes by Dominion notes, but ordinarily by draft upon the head office. It appears from the best evidence obtainable that, on the average, the life of the notes of a Canadian bank is not far from thirty days. In other words, the entire circulation is, on an average, redeemed twelve times over in the course of a year.

SCOTLAND.

221. In Scotland the issue of currency was originally upon the same basis as is that of the Canadian banks, except that there was no maximum limit imposed. Since 1845, the banks

every month. The notes paid out each month amount to about the average circulation of the bank.

4. "What measures do banks in remote districts ordinarily take in presenting for payment the notes of banks having no branch in their vicinity?"

Answer: In the case of a bank receiving notes of a bank not represented in the same town, the notes of the issuing bank are forwarded by the receiving bank to the latter's nearest branch where the issuing bank also is represented. Where they are cleared in the usual manner, or are forwarded to a redemption center, where they are collected by the agent of the receiving bank in the usual manner, between certain points mutual arrangements exist for the interchange of notes — each parcel being settled for by draft on a financial center.

Under Section 55 of our Bank Act of 1890, each bank is obliged to establish agencies for the redemption of its notes at certain points. The clause reads:

"The bank shall make such arrangements as are necessary to ensure the circulation at par in any and every part of Canada of all notes issued or received by it and intended for circulation; and towards this purpose the bank shall establish agencies for the redemption and payment of its notes at the cities of Halifax, St. John, Charlottetown, Montreal, Toronto, Winnipeg, and Victoria, and at such other places as are, from time to time, designated by the Treasury Board."

I have only to add that the system works to perfection, and I could not offer any suggestions whereby it could be improved.

have been permitted to issue notes to the amount of the coin held by them, and some $13,000,000 in addition, this latter sum being the amount of "uncovered" notes which the banks now in existence issue under the act of 1845, by the terms of which they were required to hold coin equal in amount to all notes issued in excess of the average circulation then outstanding. Inasmuch, however, as the development of the deposit system has been such as to call for a steadily increasing metallic reserve without special regard to the support of the note-issues, the result has been to leave the Scotch banks with such freedom of issue that it is exceptional when their circulation is within $5,000,000 of that which their holdings of cash would permit them to issue.

The usual practice in Scotland, some years ago, was as follows: "By agreement among the banks, exchanges of notes are held in every town where two or more of the banks have branches; in every instance once a week, on Saturday; at the larger towns, twice a week; and at Edinburgh and Glasgow, three times a week. The settlement of the Glasgow and country exchanges is made by draft on Edinburgh, and the general balance of the whole exchange is settled at Edinburgh by draft on London."[1] The result is that the weekly exchanges of notes of the Scotch banks amount to nearly one-third of their total circulation. In other words, the circulation is, upon an average, redeemed nearly twenty times over in each year

The explanation of this extremely active redemption will be recognized as that which has been suggested above—the desire of each bank to extend its own circulation against that of its neighbors.

SUFFOLK BANK REDEMPTION SYSTEM.

222. The most interesting feature of the banking experience of New England was the system of bank-note redemption which was there developed—the Suffolk Bank system—taking its name from the bank which acted as the redeeming agent.

Prior to the inauguration of the system, in 1824, the notes of banks situated at some distance from Boston were received

[1] See Report of House of Commons Committee on Banks of Issue, 1875.

only at a discount by the Boston banks. This was usually only sufficient to cover the expense involved in sending the notes home for redemption, and in later years it rarely exceeded one-half of 1 per cent. for the bills of Massachusetts banks. This discount, however, although slight, allowed the bills of the country banks to circulate in Boston to the exclusion of those of the Boston banks, which being redeemable on the spot remained at par. So long as the issuing country banks were known to be solvent, their notes passed readily from hand to hand in ordinary business transactions, although at the banks they were not accepted at par. Persons having payments to make at a Boston bank, therefore, found it advisable to lay aside for that purpose any notes of Boston banks which might come into their hands, as such notes and specie were the only forms of currency accepted at par by the banks. The outside notes, however, which were readily accepted in business, were paid out again by the merchants, and thus kept in circulation. The consequence was that the field of circulation, even in Boston, was monopolized by the notes of outside banks, on the principle that the cheaper money drives out the dearer.

It was to remedy this state of affairs by insisting upon the maintenance of all the currency at par that the Suffolk Bank system was inaugurated. The general arrangement made between the Suffolk Bank and the other banks of New England, which were soon drawn into the system, was as follows:

Each bank placed with the Suffolk a permanent deposit of $2,000 and upwards without interest — the amount depending upon the capital and business of the bank. In consideration of this deposit, the Suffolk Bank redeemed all the bills of that bank which might come to it from any source, charging the redeemed bills to the issuing bank once a week, or whenever they amounted to a certain fixed sum; provided that the bank kept a sufficient amount of funds to its credit, independent of the permanent deposit, to redeem all of its bills which should come into the possession of the Suffolk Bank. It was further agreed that the Suffolk Bank should receive from any of the New England banks which kept an account with it, the bills of any other New

England bank in good standing, placing them to the credit of the bank sending them, on the day following their receipt. When any bank refused to join the Suffolk Bank system the Suffolk Bank merely presented its notes for payment in specie at its counter. In such cases notes of other banks would not be accepted in redemption.

This practice united practically all the banks of New England, and in a large measure insured the prompt redemption of their notes at par at all times in Boston. Inasmuch as this city was the center of the commercial interests of New England and because Boston funds were at par elsewhere, a note which could be used at par in remittances to Boston was never depreciated in any part of New England.

At first there was much hostility to the system on the part of some of the banks. They objected strenuously to the necessity imposed on them of making arrangements for the redemption of their notes at Boston, and occasionally a bank seceded from the system in the hope of getting an increased circulation. In such cases, however, it at once appeared that its circulation was then limited to the immediate vicinity of the place of issue, and the inconvenience and loss of confidence resulting soon led to a renewal of the agreement. In general, it was the practice of each bank to gather together the bills of all the other banks paid in over its counter and include them in its weekly remittance to the Suffolk Bank for the purpose of offsetting the redemptions of its own bills. In this way there was very little necessity for redemption in specie, the Suffolk Bank merely acting as a Clearing-House where the notes of one bank were offset against those of the others.

In Rhode Island there was early inaugurated a sub-system of redemption on practically the same basis as the central system. The Merchants' Bank of Providence had an arrangement with all other banks of the State of Rhode Island similar to that which the Suffolk Bank had with its correspondents. The Merchants' Bank received from each Rhode Island bank at par, the bills of any New England bank, except those in the same town where the remitting bank was situated; and also redeemed at

par the notes of each Rhode Island bank. This obviated the necessity that each bank in that state should maintain a deposit with the Suffolk Bank. The Merchants' Bank of Providence sent regularly to the Suffolk Bank the notes of all New England banks outside of Rhode Island which it received. It maintained at the Suffolk a deposit sufficient to meet the notes of all the Rhode Island banks. The result, therefore, was that in every town where there were three oi four banks, those banks exchanged notes with one another. The Merchants' Bank cleared the notes for all the Rhode Island banks not covered by the exchanges between banks of the same town, while at the Suffolk the exchange between the banks of Rhode Island as a whole, and those of the rest of New England, was carried on.

The amount of notes annually redeemed through the Suffolk Bank increased gradually from $75,000,000 in 1834, to $400,000,000 in 1858. The total expenses incurred by the bank in this work for the latter year, amounted to $40,000. In other words, the business of assorting and clearing the notes was carried on at an expense of only 10 cents per $1000.

NATIONAL BANK REDEMPTION AGENCY.

223. The redemption of the national bank notes is carried on through the Redemption Agency in Washington in conformity to the act of June 20, 1874. By the terms of that act each bank is obliged to maintain with the Treasurer of the United States a deposit of 5 per cent. of its outstanding notes as a redemption fund. The Treasurer then redeems the notes of all national banks, whether assorted or not, when presented in sums of $1000, or any multiple thereof. The regulations under which this redemption is now effected are as follows:

Bank notes may be forwarded either by individuals or banks by express to the Redemption Agency in Washington from any point within the United States. The transportation charges upon these notes are paid by the Treasurer, and assessed, together with the other expenses of the Redemption Agency, upon the banks. Payment for the notes may be made to the sender in one of several different ways. Which mode of payment will be

selected depends upon whether the notes are sent by an individual, or by a bank, and whether the place from which they are shipped has a sub-treasury or not. In case a sub-treasury is located at the point from which they are shipped, payment will be made by draft on that sub-treasury, or in new United States paper currency sent by express at government contract rates at the expense of the consignee.[1] In case there is no subtreasury at the point from which the notes are forwarded, they may be paid for by the shipment of new United States notes by express at the expense of the consignee, or in silver coin at the expense of the government, in sums or multiples of $200. If the shipper is a national bank, payment for the notes may be made by giving a credit for the amount on account of the 5 per cent. redemption fund, or on account of taxation, assessments, or withdrawal of circulation. If the bank is a designated despository of the United States, credit may be given on general account. All notes thus received and settled for by the Treasurer out of the redemption fund deposited with him by the banks are then assorted so that the notes of each bank are separated from the others. The Treasury is then the holder of a quantity of the notes of various banks. The notes of each bank not reducing its circulation are charged against its credit on account of the 5 per cent. redemption fund, and such of them as are in condition to be re-issued are forwarded to the bank where they originated,

[1] The contract rates for the transportation of all kinds of paper currency to or from Washington are —

Between Washington and points in the territory of the United States Express Company and reached by it, 20 cents per $1,000, or fractional part thereof over $500; sums of $500, or fractional part thereof, 10 cents.

Between Washington and points in the territory of another express company, excepting points in Texas, Arkansas, Colorado, Kansas, Nebraska, Montana, North Dakota, South Dakota, Wyoming, and the Indian and Oklahoma Territories, 60 cents per $1,000, or fractional part thereof over $500; sums of $500, or fractional part thereof, 40 cents.

Between Washington and points in Colorado, Kansas, and Nebraska, 75 cents per $1,000, or fractional part thereof over $500; sums of $500, or fractional part thereof, 50 cents.

Between Washington and points in Texas, Arkansas, Montana, North Dakota, South Dakota, Wyoming, and the Indian and Oklahoma Territories, $1 per $1,000, or fractional part thereof over $500; sums of $500, or fractional part thereof, 65 cents.

the express charges being paid by the Treasurer and assessed upon the banks with other expenses of the Redemption Agency.

Such of the notes as are too much soiled or worn, or are otherwise unfit for re-issue, are sent to the Comptroller of the Currency and are destroyed, new notes, unsigned, of equal face value being forwarded to the bank in their place. In this case, however, the express charges upon the new, unsigned, notes are collected at government contract rates from the bank upon delivery. Inasmuch, however, as the government contract rates with express companies are much lower than regular rates, the companies require that the government guard against the danger that the operation of redemption in Washington may be used to avoid shipment of currency at regular rates by one bank to another and thus to escape the payment of exchange rates. Hence it has been made a regulation that no bills of exchange shall be furnished in payment for the notes sent in for redemption. Thus unless express charges are prepaid at regular, instead of government, rates, remittance will not be made by draft on a sub-treasury (except in cases where the sub-treasury is located in the city from which the notes are forwarded). Nor will a draft on a sub-treasury be forwarded to any bank outside the city in which the bank shipping the currency is located, for this might result in a saving on exchange to the bank due to the difference between the government and the regular express rates. For the same reason, currency shipped in payment for the notes redeemed will not be sent to any place other than that from which the notes were originally received.

But no notes of any bank will be forwarded to it in excess of the amount credited to it upon account of the 5 per cent. redemption fund. In case it appears upon counting the notes that the Treasurer has redeemed notes in excess of the amount on deposit in the 5 per cent. fund to the credit of the bank which issued them, the excess amount is retained by the Treasurer, and only so many are forwarded as are sufficient to exhaust the bank's credit on the 5 per cent. account. The bank is at the same time notified of the shipment, and is informed that the amount necessary to restore the fund to 5 per cent. of the out-

standing circulation must at once be deposited with the Treasurer. This deposit may be made in any one of four ways. Either (1) the bank may send to the Assistant Treasurer in New York a draft on New York, in which case the Assistant Treasurer forwards a certificate of deposit to Washington; or (2) it may deposit the money in any sub-treasury, and forward certificates of deposit therefor to Washington; or (3) it may remit national bank notes direct to Washington, the express charges being paid by the Treasurer and assessed upon the system; or (4) it may remit lawful money direct to Washington, the express charges, if not prepaid, being deducted at government contract rates. If the bank is reducing its circulation and has previously deposited lawful money with the Treasurer for that purpose, the notes received for redemption are charged against the bank's credit for lawful money deposited, and are then destroyed.

224. Under the Scotch system, as appears from the evidence submitted, the redemptions are so active that the entire circulation is redeemed twenty times over in a year; under the Canadian system, with its more scattered territory, twelve times in a year; and even under the Suffolk Bank system in the days before the War, with the inferior transportation facilities of that time, the aggregate redemptions in the course of a year amounted to eight times the average circulation of the banks in the system.

As appears from the figures given in Appendix II (Table 29), the annual redemption of the notes of the national banks in recent years has not varied much from 50 per cent. of the average circulation. This sluggishness of redemption under the national bank system, however, is nothing more than could have been anticipated; not because of the security of the currency, for, as has already been shown, the currency being perfectly good, the motive behind a demand for redemption in this case has nothing whatever to do with its security, but because of the desire to make a field for additional circulation, which prompts one bank to present for redemption the notes of another. All this, of course, applies only to a system where the goodness of the notes is perfectly assured. Were there any doubt on this point, eagerness to realize on the notes would become the controlling

motive. Under our national bank system the motive for the presentation of notes known to be perfectly sound has been absent, owing to the restrictions upon the issue of currency, and the necessity for investing in securities bearing a relatively low rate of interest. It has not been profitable for banks to issue circulation at all, except to the extent that it might be kept in circulation throughout the entire year. The ordinary bank, therefore, has made no provisions for supplying itself with notes which it might issue beyond the amount which it already has outstanding. When the notes of other banks are received by it, it has no notes of its own which it can put out in their place. As a consequence, all incentive for the redemption of the notes is taken away. The bank receiving them has to pay out something over its counter, and as it has no notes of its own which may be issued, it can as well reissue the notes of other national banks as have them converted into greenbacks and pay out the greenbacks.

Practically the only exception to this rule is observed in the case of the banks of certain Eastern cities. The banks in New York City, or example, upon receiving notes of national banks in remittances from country correspondents (not having occasion to pay them out again over the counter—since the business of city banks is carried on mainly through the deposit-currency) wish to convert them into lawful reserve. As these notes are received, therefore, they are sorted out and presented through the Redemption Bureau at Washington for redemption. As will be seen from Table 32 given in Appendix II more than one-half of the entire amount of the national bank notes presented for redemption in recent years has come from the banks of New York City. The extent to which they have promptly and regularly availed themselves of the existing redemption system shows that the system itself is not at fault. Its sluggishness is due, not to inherent defects in the system, but to the lack of incentive to redemption which lies in the present requirements for the issue of circulation. As those requirements are modified, and each section of the country permitted to supply itself freely with the currency which it needs

for the convenient transaction of its business, a motive for redemption will develop, and the system will, without doubt, assume an activity more like that of the redemption systems of Canada and Scotland.

It appears from the facts collected by the Comptroller of the Currency that in 1890, at a time when the national banks of the country had outstanding only $125,000,000 of bank-notes, the amount of such notes daily received by the banks in the ordinary course of their business was between $4,000,000 and $5,000,000; while the amount presented for redemption was less than $250,000. The remainder were paid out again in the ordinary course of business, because some sort of currency must be used, and the banks into which they had been paid were not in a position to issue notes of their own to meet the demand. If, however, the law at that time had permitted those banks to issue notes up to 60 per cent. of their capital, without further deposit of bonds, they would have been able, so far as legislative restrictions were concerned, to put out over $200,000,000 additional notes. Each bank of $100,000 capital in the West and South, having at that time only $22,500 of notes, all of them in circulation, would have been able to issue $37,500 more, if so many were wanted. The outcome would have been that the banks receiving on deposit $5,000,000—each having no need for those that it received which could not be as well met by its own notes—would have presented all these notes for redemption and the aggregate redemptions for the year would probably have been $1,500,000,000, instead of being but $70,000,000.

225. Under our national bank experience, with its rigid requirements for bond investments, etc., the banks have been more anxious to keep their circulation down to that obtained upon the smallest bond-deposit permitted, than to compete with one another for an extension of the circulation. The tendency has thus been to restrict the bank currency to a permanent field. The individual, knowing that the bank-note is perfectly secure, has no reason to make any distinction between it and actual coin or other lawful money, except so far as one or the other may best suit his convenience. He never thinks of asking for

the redemption of the note, and where he has occasion to make a deposit in a bank, takes no pains to sort out for deposit the bank-notes as distinguished from government notes, or coin. But in case the issue of notes were comparatively free, as in Canada, the moment the deposit should reach the hands of a banker, the difference would show itself. The government notes and coin would be sorted out, and placed aside as so much cash reserve; the bank-notes, which had been regarded by the outside public as currency, would be regarded by the banker merely as the obligations of other banks to pay him money on demand, and would be treated precisely as checks would be. On reaching the banker they would lose their character as currency, for in that capacity he would have no use for them, all demands for currency being satisfied from his own reserve of notes, which might be issued if desired; the notes of other banks would become mere bank obligations, which could be used to secure additional cash reserve, or to offset indebtedness due to the issuing bank—a purpose for which the bank's own notes would not suffice.

UNIFORMITY OF NOTE ISSUES.

226. An experience of a third of a century with a currency uniform throughout the country has naturally left in the minds of the American people a most favorable impression. To the ordinary business man the security and uniformity of the issues furnished by the national banks have been its most marked characteristics, and whatever support the national banking system has enjoyed has been in a large measure due to the satisfactory qualities of its circulation in these particulars.

It is only necessary to contrast with this experience the system of bank currency which existed in the decade before the War. In the matter of security the difference is, it is true, in some cases a marked one, although there were in the earlier periods numerous state systems whose experience demonstrated the security of the currency. But it was in the matter of uniformity—or lack of it—that the difference was most marked and the inconveniences arising most embarrassing. A person traveling from Illinois to New England in the years before the War was compelled several times in the course of the journey to exchange the currency he carried for other notes. The notes of Illinois banks, though of known value, might not circulate to any extent in Indiana and Ohio; and the notes of the banks of those states might be considerably depreciated in New York, while the notes of the New York banks, even where issued by institutions locally known to be sound, would not pass at par in Boston. The reasons for this were two.

227. The first was that outside the locality in which the notes were put out, the conditions of their issue were not known; the banks of one state were permitted to issue upon terms totally different from those of another state; even in the same state some of the banks were operating under one law, and others under another, or under special charters. As a consequence, not only was a knowledge of the conditions of issue required, but, since

the banks were not bound together in any way to make good petty losses due to the failure of individual banks, a knowledge of the management and standing of each bank was also necessary. And, as outside the locality of issue, few of those who had occasion to use bank-notes possessed information, except as to a few large and well-known banks, or banks operating under a well-established and well-known system such as that of New England, depreciation at a distance from the place of issue was inevitable.

But an even more important factor in bringing about their depreciation away from home—and one which would have existed even if the notes had been known by every one to be good—was the question of exchange. A note calling for one dollar in specie in Illinois, was not worth one dollar in Ohio, because of the expense involved in getting the note redeemed. And the further from home the test was made, and the more difficult the means of transportation, the greater the depreciation resulting from this cause. The principle involved is the same as that governing the ordinary charge for exchange in the matter of checks and drafts, and though, owing to the extreme development of transportation facilities, the charge could never again be in this country what it was before the war, if it should exist at all, it would be a source of constant annoyance and inconvenience.

The comparative superiority in the matter of uniformity under the Suffolk redemption system—which by redemption at par in Boston maintained the currency equal to specie everywhere in New England—over that of other states, such as New York—where the currency of the country banks was redeemed in the financial centers only at a discount—naturally impressed those who drafted the original National Bank Act.[1]

[1] In New York the first legislative step toward remedying defects arising from the extensive circulation in the trade centers of notes not worth their face value, was in 1840, but it did not attempt to interfere with the matter of exchange.

Every bank was required to arrange for the redemption of its notes in New York or Albany at a discount not exceeding ½ per cent. Under this scheme however, a curious practice was developed. It was found that a bank could be more profitably organized at some remote point than in these cities, even though its main business

228. Even in Canada in recent years, while the notes of the banks were known to be good—being issued by a comparatively few large institutions, easily recognizable and known to be limited in amount and the conditions under which they were issued being well known—the same difficulty has been observed. Prior to the passage of the act of 1890, the Canadian banks were required to redeem their notes only at the place of issue. As a consequence, the notes of a Halifax bank, if they should by any means have gone to Vancouver, might have been at a discount owing to the delay and expense involved in sending them home for redemption. So, too, the movement of funds being in general from the maritime provinces toward Ontario and Quebec, the notes of Nova Scotia banks would be at a slight discount in Toronto and Montreal, just as drafts upon those banks would naturally be. The revised bank act of 1890 provided that every bank should redeem its notes in, at least, one city in each of the provinces. And, as the relations of the banks in each province centered about the city designated, all discount for geographical reasons was thereby done away with, and a distinctly national character imparted to the currency.

was actually to be done and notes paid out in Albany or New York. For after paying out the notes at par, they could be redeemed at a discount of ½ per cent.—by which means a considerable profit might be made additional to the other profits of the bank. To put a stop to this practice, an act of 1848 required that the usual business of each bank should be transacted only at the location designated in its certificate. By the act of April 15, 1851, the city of Troy was added to the redemption cities, and the maximum discount at redemption agencies reduced to one fourth of 1 per cent.

Some of the banks, however, voluntarily bettered the provisions of law, and arranged for the redemption of their notes at par in New York. The apprehension that this course would restrict the circulation of the banks so redeeming, proved to be unfounded — the circulation of the banks redeeming at par in New York being evidently given a wider circulation thereby.

In 1858, an "assorting house" was organized in connection with the Merchants' Bank and the Bank of the Interior, under their joint management. This redeemed the notes of New York country banks at the regular discount of ¼ per cent. (25 cents per $100), and the notes of New England banks at ⅛ per cent. The country banks redeemed the notes from the "assorting house" through their agencies at a discount of 15 cents per $100, leaving the "assorting house" 10 cents per $100 for its compensation. Thereupon the Metropolitan Bank, which then acted as redeeming agent, immediately reduced its rates for redemption to ⅛ per cent.

So, too, in the United States, the requirement which has existed for over thirty years, that our national bank notes shall be received at par by every national bank in payments of all indebtedness to it, and by the United States in payment of dues, has been the chief factor in making the currency a national one.

229. Under the system of currency proposed by the Commission, this admirable provision of the present national bank law is maintained. The security of the currency has been otherwise provided for, but its uniformity is ensured by the requirement that every bank, as well as the United States, shall receive the notes at par in payments of indebtedness. This practically—so far as the public is concerned—makes every bank a redemption agency for the notes of every other bank. The total payments to the national banks of the country, according to the data furnished in the reports of the Comptroller of the Currency, amount to from $200,000,000 to $400,000,000 per day—in other words, a sum sufficient to permit the public to secure the redemption of all notes in their hands within a single day, if any occasion for such a thing should arise. So long as this provision exists, the currency will be uniform and national. The notes of a California bank will be taken by an individual in New York with no more hesitancy than attends their acceptance now; because everyone, no matter where he may be, knows that he can use them at par in payments to his bank.

The system proposed thus assures absolute uniformity of the currency by making it practically redeemable at every bank in the United States, and thus protects the public against any loss or inconvenience arising from the necessity of sending notes home for redemption. When each bank is obliged to accept the notes of other banks, the first step toward redemption is taken. The public thus secures the redemption of the notes in its hands to any extent desired. But for the purpose of completing the process of redemption, and permitting the banks which have thus accepted the notes of other banks to obtain their payment with the least delay, inconvenience and expense, it has seemed wise that the present system of national bank-note redemption by the United States should be extended to include points so distributed

throughout the country as to be easily accessible to every section. That is, at the discretion of the Treasury, any sub-treasury may be designated as a redemption agent.

Moreover, the provisions for the printing of notes under government supervision upon the distinctive paper used for printing United States currency, and the registry of all such notes in the office of the Comptroller guarantee the public against fraudulent over-issues of notes and also afford the greatest possible protection against loss through counterfeiting.

BANK RESERVES.

230. It is necessary that a bank in order to be able at all times to meet its demand obligations when presented, should have some portion of its assets always on hand in the form of cash. The amount of cash reserve thus needed will depend upon many circumstances — the business habits of its customers, the extent and character of its demand liabilities, and especially upon the degree of caution and conservatism employed in its management. In well-established banks, managed by prudent and experienced bankers, the problem always settles itself without difficulty. Experience determines what proportion of the deposit or note liability the bank requires in the form of cash to meet any calls which may be made, and the amount actually held is always safely above the limit which is thus in practice found to be required.

If, however, the banking business is carried on by numerous small banks managed by inexperienced bankers, and especially if it has been taken up by imprudent men, wrecks are most likely to be caused by a disregard of the dictates of caution regarding reserves. Seeing everything moving smoothly, and calls for specie only nominal, reckless or inexperienced bankers too often permit themselves to lose sight of the possible contingencies for which a cash reserve should always be held, and to extend their demand liabilities without making provision for a proper specie basis.

231. This especially characterized the banking development of the years preceding the commercial collapse of 1837–1839. The discussion on the question of reserves then taken up by the banking world led to the requirements for the maintenance of a definite specie reserve against liabilities which were first incorporated in banking legislation. In the years just before 1840, the idea of restraining the many small independent banks from reckless expansion by the requirement of a fixed reserve was

given increasing attention, until, by the time the national banking system was inaugurated, it had come to be in some form an accepted feature of bank regulation.[1]

It is interesting, however, to see that in this development of a reserve requirement there was no consistent application of the principle to all demand obligations. In some states, as in Louisiana, in Massachusetts, and in Iowa after 1858, etc., the reserve required was measured by deposits and circulation, while in others, New York, Connecticut, and Ohio, for instance, the circulation alone was taken into account. In the original organization of the national banking system, the reserve required was counted against both notes and deposits. In its final form the required reserve has been held against deposits alone — the current redemption of the notes since 1874 being regarded as well cared for through the 5 per cent. redemption fund at Washington.

232. The regulation prescribing the maintenance of a definite reserve which has thus developed in this country has grown out of experience, which has from time to time indicated that numerous small banks, managed in many cases by inexperienced bank-

[1] The earliest bank charters in this country usually limited the amount which the bank should at any time owe to two, two and one-half, or three times the amount of the capital stock paid in — apparently with the idea that $1 of specie paid in as capital might support bank credits of $2 to $2.50 or $3. The charter of the Marine and Fire Insurance Co., granted in Georgia in 1825 with banking powers, went a step farther, and provided that the specie kept should be equal to one-third the circulation.

With many unfortunate examples of reckless banking fresh in mind, the legislatures of several states enacted laws in the years 1838 to 1840, requiring the maintenance of definite specie reseves. For example, Georgia required by act of December 26, 1838, that the specie on hand should not at any time for the space of thirty days be less than one-quarter of the circulation. New York, in its Free Banking Law of 1838, required a specie reserve of 12½ per cent. of circulation; though this was repealed two years later. Ohio, in 1839, required specie reserves of 33⅓ per cent. of notes, though a larger circulation might be issued if the stockholders and directors became liable therefor. Louisiana, also, in 1842, required specie reserves of one-third of aggregate liabilities. Maine, in 1846, adopted a law based in a way on the English Bank Act of 1844. It required that every bank should have on hand specie to the amount of one-third of its notes in excess of 50 per cent. of capital, and specie in full for every dollar of circulation above 125 per cent. of capital. Connecticut, in 1848, prescribed a specie reserve of 10 per cent. against notes; Massachusetts, in 1858, one of 15 per cent. against notes and deposits, but with the privilege of including specie funds on deposit in Boston.

ers, needed the restraint of some such requirement to inculcate caution. But in recent years there has been a general improvement of bank management, in the national as well as in other banking systems. Instead of a reserve in lawful money of 6 per cent. of deposits—the requirement under the present law—the national banks outside of reserve cities keep constantly on hand about 15 per cent. of deposits. Indeed, there has latterly grown up a strong feeling that the disadvantages of the system of required reserves outweigh its advantages. The foreign banks, it is pointed out, do not assign to a requirement of this sort any such place as it occupies in our system.[1]

These banks, left free to keep such reserve as they choose, are able, by raising and lowering the rate of discount, to adjust their business to their reserves; to augment and protect their reserve by an increase of the rate of discount, and when the reserve accumulates, to extend their loans by lowering the rate of discount.

But the reserve regulations exist as a part of our national banking system, and it has not been considered essential by the Commission that a change should be made at present.

233. The present law requires every bank located outside of certain specified cities to have at all times on hand lawful money to the amount of 15 per cent. of its aggregate deposits; though it may count as a part of this reserve deposits with approved reserve agents in the so-called reserve cities up to an amount

[1] In England the note circulation was removed by the act of 1844 from the field of discussion in this connection. As to the bank reserves against deposits, both the Bank of England and the private and joint-stock banks are entirely free to hold as much or as little reserve as they may see fit. The Bank of England actually carries, at the present time, between 50 and 60 per cent. of its deposits as a reserve, while the joint-stock and private banks, keeping the greater part of their reserve with the Bank of England, carry only small reserves in cash. The Scotch and Irish banks have no requirement for reserve to be held against deposits, or against the amount of notes which they were issuing in 1845, when the present system was adopted.

The Canadian banks also have no requirement; nor has the Bank of France.

The German banks are required to maintain a cash reserve of 33⅓ per cent. against notes, but no definite reserve against deposits. The Bank of Austria-Hungary requires 40 per cent. against notes, as do the banks of Switzerland, but neither makes any requirement of reserve against deposits.

equal to three-fifths of the reserve required,[1] and also the 5 per cent. redemption fund with the United States Treasurer. Banks located in the "reserve cities" must keep a reserve equal to 25 per cent. of their deposits; but one-half of this may consist of balances with approved reserve agents in the central reserve cities — New York, Chicago, and St. Louis, and the redemption fund may be counted as a part of the required reserve.

There are unquestionably some serious difficulties growing out of our reserve-city system because of the extent to which, under its operation, the financial centers are periodically flooded with country deposits, and shortly afterwards drained again. But the problem is a commercial one to be settled by the laws of trade, which, as explained elsewhere,[2] naturally lead at times to the shipment of currency and transfer of balances to the financial centers. Furthermore, it would appear that to the extent that depositors wish to have their funds furnished them in New York, or in other reserve cities, the system is logical enough.

[1] It is interesting to note the origin and development of this permission to count deposits in other banks as cash on hand. In Massachusetts, the act of 1858, which made the first legal requirement in that state for the maintenance of a specie reserve, applied to both deposits and to notes; and as the notes of the Massachusetts banks were then almost entirely redeemed in Boston — very few being presented for redemption at the counter of the issuing bank — it was quite natural that the reserve to be maintained should include "balances in other banks, not bearing interest, which may be applied to the redemption of their bills." The provision for counting deposits in other cities as a part of the required reserve originated, therefore, in the desire that the funds to meet the liabilities should be where the chief liability was to be met.

So, too, under the national banking system, as it existed for the first ten years, where a reserve against both notes and deposits was required, the notes were to be redeemed by national banks in certain cities acting as agents, and balances in their hands, presumably placed there to provide funds for that redemption, were permitted to be counted as a part of the required reserve.

After the substitution of a separate redemption fund for notes in 1874, the required 15 per cent. and 25 per cent. reserves were left to apply only to deposits; nevertheless — though the reason which originally existed no longer prevailed — the deposits with agents in the "reserve cities" were still counted as a part of the reserve. It is no doubt true that, as applied to deposits, this system as it exists is illogical, except to the extent that those deposits are called for in the shape of exchange payable elsewhere.

[2] See Section 76.

In the requirement for the maintenance of a definite reserve, it is not intended that this reserve should not be used. On the contrary, the very idea of a reserve implies that it is there for use — to be drawn down to the last dollar if need be. It is merely intended that the limit imposed by the law should act as a warning bell — a notice to the bank that its reserve, when it falls below the limit, is less than conservative bankers would in general approve, and that steps should be taken to restore a better proportion between cash and liabilities. To this end the bank is forbidden to loan or discount time paper when its reserve is below the limit, and the Comptroller of the Currency may, if the reserve is not made good in thirty days, appoint a receiver to take charge of the bank.

Under the conservative exercise of this power by the Comptroller of the Currency, it will be seldom necessary to take summary action. The reserves of numerous banks have on several occasions fallen below the limits; but they have been restored in each case within a few days. Probably the most striking instance occurred in the first week of August 1893, when the aggregate reserves of the New York City banks were $14,000,000 below the 25 per cent. limit.

234. With the ultimate retirement of the United States notes and Treasury notes contemplated in the recommendation of the Commission, and the dispersion of the greater part of our silver currency in the form of coin and certificates of small denomination in actual use as the large change of the country, the only kind of money left for bank reserves will be gold. Looking toward this end, it has seemed advisable that even now the banks should be required to hold in coin at least one-fourth of such reserve as is prescribed by law. Such a requirement would result in no hardship to the banks operating under the national system, even if, under the necessity of acquiring the gold, some special sacrifice would be involved. How the gold would be obtained has already been considered in the discussion on the Movement of Gold.[1] As a matter of fact, however, most of the national banks of the United States already hold more gold

[1] See pp. 146–158.

than would be required under the plan proposed. As may be seen from Table 28 of Appendix II to this Report, there are but few states and cities where the present gold holdings of the banks do not considerably exceed the coin which these banks would be required to hold under the plan proposed by the Commission.

INSPECTION AND EXAMINATION OF BANKS.

235. Inspection of banks and publication of the reports of examinations into their condition is necessary in a system of comparatively small but numerous banks. Where only banks of large capital, directly responsible to the government for their conduct, exist, there is little or no need of minute investigation into their condition, unless there are restrictions upon the business of these banks to be enforced. The situation is different under a system of free banking like that of the United States. Here banking may be engaged in by any persons, however unfamiliar with its principles, who have the necessary capital.

Inspection and publication of reports, therefore, are desirable for several different reasons. (1) Where but small amounts of capital are devoted to the establishment of individual banks, sudden losses, even though of comparatively insignificant amount, are likely to result in the ruin of the institution. It is, therefore, necessary to make public the accounts of such banks in order to show their condition. Depositors and the public will thus be informed of the situation of banks with which they may wish to have business relations, and need not ignorantly run any risk. This, however, applies quite as well to banks of large capital. (2) A system of free banking sometimes makes necessary a regulation of the business of banks, both large and small, owing to the inexperience or indiscretion of their managers. Examples of such restrictions are seen in the reserve requirements of the national banking system, and in various other regulations. In order that officials may be in a position to know that these regulations are observed, some system of reports or inspection is necessary.

236. One of the most important forces in holding banks to sound business methods is frequent publication of reports upon their financial condition. In order to make these of much use they should exhibit clearly the movement of all of the important

items in the accounts of the banks. This is absolutely necessary to a thorough understanding of the nature of the bank's business, as well as of its immediate condition. The fuller these reports are made the greater will be the security against illegitimate business, since the character of this business will at once appear.[1]

[1] By the original National Bank Act of the United States, in addition to quarterly reports, showing under appropriate heads the resources and liabilities of the banks, a general monthly statement was required from them. This was to show only the average amount of loans and discounts, specie, and other lawful money, deposits and circulation.

The system of reports thus provided for proved to have serious defects. "This monthly statement," said the Comptroller in 1867, "is too vague and general to give any correct or reliable information as to the actual condition of the banks. A full and detailed report monthly would be of great value to the public, and would afford more constant insight into, and familiarity with, the management and condition of the banks for the guidance of the Comptroller than he can possibly obtain under the present system of quarterly reports. . . . . It is, therefore, recommended that in lieu of the present quarterly reports and meagre monthly statements a full exhibit of the affairs of each bank shall be required on the first Monday of each month." These reports were done away with by the act of March 3, 1869. The reports now required of national banks must specify:

RESOURCES.	LIABILITIES.
Loans and discounts.	Capital stock.
Overdrafts.	Surplus.
U. S. bonds.	Undivided profits — less expenses.
Stocks, securities, judgments.	National bank notes outstanding.
Banking house and fixtures.	State bank circulation outstanding.
Other real estate and mortgages.	Due to other national banks.
Due from national banks.	Due to state and private banks.
Due from state and private banks.	Due to reserve agents.
Due from reserve agents.	Dividends unpaid.
Checks and other cash items.	Individual deposits.
Exchanges for clearing house.	United States deposits.
Notes of other national banks.	Notes and bills rediscounted.
Money of each kind on hand.	Bills payable.
Five per cent. redemption fund.	Other liabilities.
Due from U. S. treasurer.	
Aggregate.	Aggregate.

The weekly reports of the German banks must specify (*a*) on the side of liabilities: The amount of the reserve fund, the amount of notes in circulation, obligations (both demand and other), deposits, and all other liabilities; (*b*) on the side of assets, coin and bullion, the sum of German currency on hand (gold in bullion or in foreign coin to be reckoned at 1,392 marks per pound fine), the amount of Imperial Treasury bills, notes of other banks, bills of exchange, loans on security (both merchandise

It is furthermore necessary that reports should be made with great frequency, since the situation of banks is often materially altered by the transactions of a single day. The frequency with which reports should be made is, however, largely dependent on the character of the business carried on by the banks of a system, the number of the banks, the habits of their depositors, etc. It must, therefore, be determined chiefly by actual experience. In general, however, it may be said that reports should be made as often as possible without causing undue expense and annoyance to the banks reporting. Reports cannot be made as frequently, nor are frequent reports as necessary in some cases under a system of numerous banks under different managements, as in the case of some more centralized systems.[1]

and commercial paper), stocks, and all other assets. The Federal Council determines which classes of assets and liabilities are to be separately indicated in the yearly balances, and, in both the yearly and the weekly reports, there must be evidence of such contingent obligations as may have arisen from the negotiation of countless additional domestic bills of exchange.

By the Canadian banking law the reports which the banks organized under the act are required to submit to the Minister of Finance are even more elaborate than those required by the bank laws of the United States, as will be seen by a comparison with their statement.

Even the elaborate reports now required of the national banks of the United States are regarded by many as inadequate. In this connection Mr. F. W. Gookin, cashier of the North-Western National Bank of Chicago, writes as follows:

"Statements should be more comprehensive than those now required of the national banks. Banks cannot be considered apart from their relations to the public, and no sound and well-managed institution should object to a full and accurate showing of its condition. Especially does this apply to banks authorized to issue currency. I would recommend that the following items be specifically given in the published statements:

I. The total amount of assets considered bad or doubtful.

II. The total amount of past-due paper held — including in this category all demand paper upon which interest has not been paid for a specified period, say, six months.

III. The aggregate amount of loans to officers and directors.

IV. The total amount of loans on real estate, or on notes secured by real estate, as collateral.

V. An inspector's certificate of the state of the bank at the last examination."

[1] Section 34 of the national bank act of June 3, 1864, provided that every bank should make to the Comptroller of the Currency reports showing its condition at the opening of business on the morning of the first Monday of the months of January, April, July, and October of each year, and should transmit the report to the Comp-

While the requirement of five reports per annum had an excellent effect in stimulating banks to keep themselves in a solvent condition, the opinion that reports are not required to be made with sufficient frequency is quite prevalent.[1] The introduction of a system giving greater liberty in the issue of notes and imposing a tax, regulated in accordance with the volume of the notes in circulation, would make it of still greater importance to have frequent reports.

237. An important point to be considered in connection with

troller within five days. Abstracts of these reports were to be published in a newspaper in Washington, and in a newspaper in the place where the bank was established. In addition to this, reports were to be made by the banks on the first Tuesday of each month showing the status of the principal items of the bank on the morning of the day next preceding. These provisions, as has been seen, were repealed by the act of March 3, 1869, and in lieu thereof was substituted a requirement of five reports annually.

At the present time most of the banking systems of the world have regulations, expressed or implied, regarding the publication of reports, and the conduct of examinations, or both. Under the German banking system, notes issued in excess of a certain amount are subject to a tax. A specified proportion and kind of reserve is also required. It is thus necessary to have frequent reports as to the condition of the banks, and especially to know just what is the volume of notes outstanding, and what is the nature of the reserve kept. The bank act of 1875, therefore, provides that "banks issuing notes are required (*a*) to publish reports of their assets and liabilities on the 7th, 15th, 23d, and on the last day of each month, and the utmost limit on delayed reports must not exceed five days from the appointed term; (*b*) to publish within three months, at the latest, from the close of each business year an exact balance of their assets and liabilities, together with yearly statements of their profits and losses — the said reports to be published in the *Imperial Bulletin* at the expense of the bank."

Canadian banks are required to submit to the Minister of Finance a full report of their condition within the first fifteen days of each month, the penalty for failure to submit such accounts being $50. Special reports may also be required when they are considered desirable.

Weekly returns showing the movement of the chief accounts are voluntarily published without formal requirement by most of the large banks of the world.

[1] In answer to the interrogatories of the Commission, Professor C. F. Dunbar of Harvard says : " The full reports, now made five times a year, should be made by all banks monthly to the Comptroller, and also in every redemption district to some office or officer for possible publication, and, at any rate, for the information and use of banks and government officers."

" Monthly statements of the condition of each bank," says Henry W. Poor of New York, "should be required, the making of incorrect or false ones being made a high penal offense."

the dates of bank reports is the means of making them truly indicative of the normal condition of the institution reporting.

It has been clearly demonstrated by the experience of the United States, that where reports are made at infrequent but definite intervals, banks are likely to make such preparations beforehand that the reports do not display their normal condition. This was the case under the old state bank systems in operation before the Civil War. Under the original national bank act, in accordance with which reports were required at specified dates, it was found that banks were not likely to keep themselves in as good condition as would have been the case had they been constantly in expectation of being called upon for a report.[1] This led to the act of March 3, 1864, by which the Comptroller was authorized to name some dates in the past for which reports should five times a year be rendered. While

[1] "It is known, understood, and anticipated by all who have dealings with the banks," said the Comptroller in 1867, "that they are in the habit of preparing systematically for making creditable exhibitions on quarter-day. It is certainly a point gained to know that the banks can make a good showing at least once every quarter, but it would be more satisfactory to know that they could do so at all times."

The Comptroller again recurred to the subject in his report for 1868, "The quarterly reports," said he, "coming as they do upon a certain specified day, known in advance and for which the amplest preparation may be made, can hardly be expected to present the actual working condition of the banks. They are, of course, careful to exhibit the full amount of reserve required, and otherwise a full compliance with all the important provisions of the law. But it is in large cities, especially in New York, that this plan proves most objectionable. Gold and stock speculators, knowing that at a certain time the banks will make it a point to have a full supply of lawful money in their vaults, get up combinations for the purpose of producing a scarcity of legal tender notes and a stringent money market. . . . . National banks, held firmly to the requirements of the law, are seriously embarrassed by such trickery. Their necessities compel them to have the lawful money at any hazard. It is becoming more manifest that the evil is becoming more and more intolerable." He again recommended the requirement of reports at dates fixed at the discretion of the Comptroller only.

In accordance with these suggestions Congress, recognizing the real necessities of the case, finally passed the act of March 3, 1869. This act provided that "in lieu of all reports required by section thirty-four of the national currency act, every association shall make to the Comptroller of the Currency not less than five reports during each and every year according to the form which may be prescribed by him, verified by the oath or affirmation of the president or cashier of such association, and attested by the signature of at least three of the directors; which report shall exhibit in detail and under appropriate heads the resources and liabilities of the association

the present system of reports has not been unsatisfactory, (although it is thought that banks sometimes prepare themselves in anticipation of being called upon for a report, and although the publication of the reports in the local newspapers is not likely to make them most available), it is felt that reports should be made more frequently. The Commission has, therefore, suggested that the Comptroller be empowered to call for such reports as he may deem best. These need not necessarily be published, but could be printed monthly in a form convenient for distribution to such persons as may apply for them.

Good results could probably be obtained were banks having close business relations with one another to be formed into groups, the members of which should furnish to one another weekly reports of their condition, as is done by the New York banks at present. In this way the banks of each group would keep a close watch upon one another's operations. The clearing-house banks of New York already require weekly reports of the condition of all banks clearing through the Clearing House. Examinations may at any time be made by the clearing-house committee.

238. Experience with the present system of examination of national banks has not been fortunate.[1] At present the

at the close of business on any past day to be by him specified, and shall transmit such report to the Comptroller within five days after the receipt of a request or requisition therefor from him."

The provisions of the new act proved to be much more satisfactory than the earlier ones. Less than a year after the act was passed, the Comptroller was able to report as follows: "The two evils most complained of under the former system of reports, to wit, previous preparation on the part of the banks and the opportunity afforded to speculators to manipulate the money market, have been almost entirely done away with. The banks habitually keep themselves in better condition, as a rule are less extended, and have more complete control of their affairs."

The changes in the national banking act as to this point were based upon experience under some of the old state banking systems. New York in the old free banking act of 1838 had at first required only semi-annual reports. These gave way in 1841 to annual, which in turn were superseded, in 1843, by quarterly, reports. Much the same experience as that had by the United States under the national bank act in its unmodified form, led, in 1847, to an act requiring the quarterly reports to be made out after the first of each quarter for some date during the preceding quarter designated by the Comptroller.

[1] The Comptroller was authorized by the first National Bank Act to appoint a suitable person to examine every bank, who should "not be a director in any association

ordinary examinations are largely formal, and of little value so far as any real indication of the character of the discounts is concerned. Being made by persons who are strangers to the locality, and hence unfamiliar with the business paper of the place, they cannot afford any important information as to the real situation of the banks. The examination of banks which are about to begin business, or which have avowedly failed or suspended, are usually performed in such a way as to display the actual condition of the bank. Ordinary examinations, however, are seldom of much value, and they, moreover, lull stockholders into a false feeling of security, which prevents them from taking the active interest in the bank's affairs which they otherwise would. This is also the case with the directors, who, supposing that their institution is being watched over by the general government, fail to perform the full duty of overseeing the bank which has been entrusted to them.[1]

whose affairs he shall be appointed to examine." The fee of such examiner was fixed at $5 per day for every day spent in conducting the examination and $2 for every twenty-five miles which the examiner was obliged to travel.

"Perhaps no one thing," said the Comptroller in 1869, "has done more to promote the safety and sound management of national banks than their liability to examination, without previous notice, by an agent appointed for that purpose, and probably no provision of the law was more unpopular among the banks when the law first went into effect; but the good results brought about, directly and indirectly, by such examinations have fully vindicated the wisdom of the provision." The Comptroller believed, however, that the pay of examiners was inadequate, and that the system by which their pay was regulated was unsatisfactory. He, therefore, recommended changes in these respects.

In accordance with these suggestions, the act of Feb. 19, 1875, made the desired alterations in the method of compensating national bank examiners. It regulated the fees paid proportionately to the capital of the bank examined. These were now to range from $20 for the examination of banks whose capitals were less than $100,000 to $75 for those whose capitals exceeded $600,000. The compensation of examiners of banks located in reserve cities and in certain other cities and states was to be fixed by the Secretary of the Treasury, and in every case the amount of this compensation was ultimately to be made good to the government by an assessment upon the banks examined.

[1] Upon this point Mr. F. W. Gookin in a communication to the Commission writes as follows:

"The inspection should be as thorough as that which the English and Canadian joint-stock banks prescribe for their branches. It should be far more comprehensive than the examinations now made by the national bank examiners, and should amount

239. The Commission has, therefore, recommended in its plan that the examinations of banks be made more frequent and thorough. To this end authority should be placed in the hands of the Comptroller of the Currency to make the examinations adequate to the purpose they are designed to serve. The examiner should have authority to call together the directors of any bank and question them under oath concerning such of their discounts as he may think fit.

Furthermore, there are some practices in the existing system

to an auditing of the entire business of the banks. The corps of inspectors should be appointed by the Comptroller of the Currency and be under his control. They should be detailed to visit the several banks in rotation, and no two consecutive examinations of any one bank should be made by the same inspector.

"The compensation of the inspectors should be sufficient to attract men competent not merely, to balance the books and prove the nominal accuracy of the assets of the banks examined by them, but to judge of the quality of the bills receivable and securities held. They should be forbidden by law from borrowing from the banks, and the banks from lending to them. And in the event of the insolvency, or the serious impairment of the capital stock of any bank examined by them, their failure to discover and report the fact should subject them to a severe penalty."

Speaking on this same subject Professor Chas. F. Dunbar of Harvard says: "The supervision of banks should be greatly increased and carried on by permanent local inspectors or deputies under the authority of the Comptroller (say one in each redemption city), so as to secure some local familiarity with the standing of particular banks, the character and general repute of their officers, and their business relations. The causes of failure sometimes given in the Comptroller's report are instructive as to the necessity of a supervision having better facilities for early information than the present, and also as to the needs of much more frequent statements."

Professor Kemp P. Battle, of Chapel Hill, N. C., suggests that "the bank examiners be required to inspect the assets, etc., five or six times a year, *including the examination of the strength of the securities*, with power to examine witnesses on oath."

Hon. Isidor Strauss, of New York, writes as follows: "I would recommend examination and inspection the same as at present, only I would have enough inspectors, so that every institution could be examined at least twice a year, and oftener, when, at the request of any clearing-house association, it is found desirable to investigate any particular bank."

Much the same opinion is expressed by Mr. Edward King, President of the Union Trust Company of New York. "I may say generally," he remarks, "that frequent examinations by the directors, added to periodical inspection without notice by the the government, coupled with the watchfulness of corresponding banks and of clearing-house associations, would seem to offer as good provisions as can be devised to prevent bad banking, but, after all, the main reliance must be placed upon the character and ability of the executive officers under the restraint imposed by the above safeguards."

which give rise to fears that even the items of banks as stated may not always be reported with absolute accuracy. The rumors that examiners ask and receive an "honorarium" suggest a state of things inconsistent with accurate examinations; and there is opportunity for other abuses of the same sort which should be corrected. The Commission has, therefore, recommended that bank examiners be paid adequate fixed salaries, according to some uniform rule, thus avoiding all excuse for the payment of additional emoluments by banks to examiners. It has further been suggested that the loaning of money by banks to examiners be forbidden under penalty; and—to avoid, as far as possible, the risk of violation of the law—that the examiners be assigned to banks, in rotation.

Most of the difficulties to be overcome in obtaining a satisfactory plan for bank examinations may be classified under two heads: (1) those arising from the danger of dishonorable dealings between banks or bank officers and examiners; (2) those due to the difficulties arising from unfamiliarity with the discount paper of the business communities where banks are located, and the obstacles to examinations at once brief and thorough. The difficulties are thus of a nature which can be solved only by experience.

TAXATION OF BANKS.

240. The argument is frequently advanced that the charter granted to a bank partakes of the nature of a "franchise," and as such should be subject to special taxation. By this it is apparently meant that bank charters are analogous to natural monopolies, or at least that their privilege of note-issue is so comparable. Without stopping to discuss to what extent this might be the case if we should suppose that only a limited number of banks were to receive charters, or that, as in France, a single institution were to be granted the exclusive privilege of issuing notes, the argument is manifestly without foundation under a system like the present national banking system, in which any group of persons possessed of adequate capital is at liberty to organize a bank and take out circulation. Inasmuch as the business of banking is fully open to competition, and may be engaged in by any number of persons, and since circulation to any desired amount may be issued by those who conform to the legal requirements, it is quite impossible to argue that the existence of a franchise or monopoly privilege justifies the imposition of special taxation. This was clearly recognized by Massachusetts, which, in the tax system of the ante-bellum period, imposed the tax upon capital stock only on the chartered, and not on the free, banks.

241. This point of view has resulted in a demand for, and, in some quarters, an attempt to impose, differential taxes upon banking capital. Such taxes have taken almost every possible form at various periods. Some of the most common are: (1) Taxes on circulation; (2) taxes on deposits; (3) taxes on capital, or capital and surplus; and (4) taxes upon bank shares. Most states have gone so far as to prohibit the organization of banks under special charters.[1]

[1] Some of the early state laws providing for direct taxes upon banks were the Georgia Act of 1805; the Massachusetts Act of 1812; the Pennsylvania Act of 1814,

The passage of the National Bank Act of 1864, which permitted taxation of individual holdings of bank shares, though not at a greater rate than that applied to other "moneyed capital,' wrought something of a revolution in the methods of taxing banks. At the present time, after a long legal controversy, there is a tolerably uniform practice in the matter of bank taxation. Most states now assess a tax on the value of bank shares with the same drawbacks as are allowed in the case of other "personal property" taxes. The result has been that, because bank shares are unable to evade the tax as do other forms of personal property, the banks pay more than their share of all taxes on personal property. In some states there exist additional taxes upon capital stock (instead of shares in the hands of individual shareholders, net earnings, or surplus and undivided profits), besides a license tax which still persists in a few states.

Under Federal laws, fiscal needs have, as is well known, led to the imposition at various times of special taxes upon banks as institutions peculiarly fitted to bear exceptional burdens. The war taxes upon checks, capital, deposits, and circulation imposed a heavy annual burden upon the banks which was not lightened until the repeal of these taxes, March 3, 1883; the tax upon circulation was, however, retained.

242. Like all special taxes, which fall only upon certain forms

which imposed heavy taxes on capital, circulation, or dividends. At one time the tax on dividends rose as high as 11 per cent. and in 1859 Pennsylvania extended it to banks of discount and deposit. This tax was progressive in its character, and was probably the heaviest bank tax prior to 1862 of which we have any record. Ohio and Virginia also taxed banks on their dividends, and certain other states, in chartering banks, reserved to themselves a portion of the profits. The tax on dividends was adopted very early in Ohio and considerably later in Virginia, but persisted in Virginia until long after the Civil War. Massachusetts taxed banks on their capital stock as early as 1812, and continued to do so until 1863. This was in addition to a tax levied upon individual stockholders. As already remarked, however, this tax applied only to chartered and not to free banks. Louisiana taxed banks on their "stock in trade" as early as 1813, and other states imposed a heavy "personal property tax," besides the usual tax upon real estate. New York, in the law of 1823, assessed a tax on the par value of the stock and continued to collect it until 1847, after which date it was assessed upon market value. North Carolina did not tax capital stock until 1859. Compare SELIGMAN, *Essays on Taxation*, pp. 143 *et seq.*

of capital, it is the consumer, and not the producer, who pays them. In other words, a tax upon banking capital will fall upon borrowers, and not upon the banks themselves. This is largely due to the high mobility of capital. If it cannot obtain in any employment the usual reward, it will migrate to other occupations where normal gains can be secured. If it were true, as currently charged, that the banks of the country possess a monopoly, and hence are able to obtain returns higher than those gained in other forms of investment, the transfer of capital just indicated might not take place. The fact remains, however, that the average net earnings of national banks upon capital and surplus have amounted from 1870 to 1895 only to 7.8 per cent. annually. This can certainly not be regarded as an excessive return to business capital, and hence no charge of excessive earnings can be sustained. It follows, therefore, that the weight of a tax on banking capital will be shifted to the borrowers at those banks. This may be clearly seen in the working of the tax on circulation itself. In order to make the discussion clearer, suppose at first that a tax of 1 per cent. is levied upon the use of all currency other than the "lawful money" of a country. Those who apply for accommodations at financial institutions must of course receive their loans in one of three forms — (1) deposits, (2) bank-notes, or (3) lawful money. The bank being now obliged to pay a tax on its deposits and notes, must recoup itself, and will be able to do so by raising the rate of interest on its loans.[1] The rate of discount will, therefore, ultimately be raised somewhat upon all the loans of the bank, but not in the long run by the full 1 per cent. of the tax, because any liabilities arising from the making of loans, which have been extinguished by payments of cash by the bank will, be untaxed. If the tax is a temporary one, assessed only upon notes issued in excess of a certain maximum, something like the total amount of the tax will be much more likely to be shifted direct to the immediate borrower. In this case, no one suffers except the borrower. If, however, the tax be a regular assessment, those

[1] It should be noted, however, that this tendency to shift the tax will, to some extent, be offset by the friction which always impedes such economic movements.

who are obliged to borrow capital from banks will, of course, take into account the higher rate of interest they must pay, and will expect to obtain such a return on their investment as will compensate them for the extra outgo. The tax will be distributed over practically the whole of the community, since most of those who engage in business enterprises are at one time or another borrowers at the banks, and will thus fall not upon the banks but upon all users of borrowed capital or the consumers of their products. As regards the shifting of the tax, practically the same will be true of a tax levied upon the capital stock of a bank as of one levied upon its deposits or notes.

243. There may be two general objects to be gained by the assessment of a tax: (1) revenue or (2) restraint of some banking practice. The present 1 per cent. tax upon bank circulation is said to be intended for revenue purposes only, and in raising revenue it has certainly been successful. It has often been upheld, too, on the ground that it is levied merely to cover the annual expenses connected with the control of the national bank circulation. This argument, however, must be considered only partially admissible, for the total of such expenses not especially assessed upon and paid by the banks during the period from 1863 to 1895 has been but $8,170,000.98, while the income of the tax upon circulation during the same period has been $81,411,384.54. Even if it were true that the tax covered only the expenses of the system, the fact still remains that it is grossly unfair in its incidence. This unfairness is due to the circumstance that, although the tax is nominally a general one upon all circulation, it is so only in name. This is a consequence of the differences in commercial habits prevailing in different portions of the business community, and especially of country as distinct from urban districts. The wide extent and the varied economic interests of the United States ought to render us exceptionally careful in imposing restrictions which may be found to be more favorable to one region than to another.

As already so often mentioned, the demand liabilities of any bank may take either one of two forms indifferently: (1) they may be in the form of deposits or (2) of circulating notes. Of

these the notes are commonly preferred in regions where population is sparse. If, therefore, a tax be levied upon circulating notes, and not upon deposit-currency, those institutions whose customers demand notes are at a relative disadvantage. They must either lose the amount of the tax or charge their customers sufficient additional interest to make it up, and the latter is the course they will most naturally pursue. Those, however, who work with capital borrowed at a rate of interest higher than that prevailing in other parts of the country subject to similar economic conditions labor under a disadvantage. All this may be made clearer by taking a simple illustration:

The situation of the 202 national banks in Illinois, outside of Chicago, October 5, 1897, was as follows:

RESOURCES.		LIABILITIES.	
Loans and discounts,	$46,863,899	Capital stock, - -	$17,776,000
Other resources, -	38,786,289	Circulation, - -	5,484,937
		Deposits, - - -	52,739,741
	$85,650,188	Other liabilities, -	9,649,510
			$85,650,188

At the same date the situation of the nineteen national banks of Chicago was this:

RESOURCES.		LIABILITIES.	
Loans and discounts,	$ 86,832,905	Capital stock, - -	$ 19,700,000
Other resources, -	89,353,551	Circulation, - -	616,365
		Deposits, - -	145,561,940
	$176,186,456	Other liabilities, -	10,308,151
			$176,186,456

Under these circumstances, although the combined capital of the 202 country banks was much smaller than that of the nineteen city banks, the tax paid by the country banks upon circulation, supposing this to be their average circulation, must have been $54,849, while that paid by the city banks must have been only $6,163. It thus appears that with less combined capital the country banks of Illinois, and consequently, the communities in which they were located, were paying at the date

mentioned under the guise of a tax of 1 per cent. upon circulation, an amount nearly nine times as large as that of the combined national banks of Chicago.

Unless accompanied by a tax upon deposits, therefore, a tax upon circulation works gross injustice to those communities which, by the character of their business conditions, are compelled, or find it desirable, to use notes instead of deposits as currency. It is to meet this injustice of the present tax upon circulation that the plan of the Commission proposes to make the franchise of the bank as measured by its combined capital, surplus, and undivided profits the basis of assessment. In this way the expense of carrying on the system will be made to fall, as it should, upon the country as a whole, instead of, as now, upon those places which support smaller institutions. In this way, also, the tax is imposed upon what the banks own and not upon the particular tool which their customers use.

244. An object different from that of obtaining revenue or paying the expenses of the system is, however, sought in the imposition of the frequently proposed tax upon all circulation in excess of a specified amount. Nearly all the plans for banking and currency reform put forward within recent years have included some provision for imposing a tax upon the whole or a part of the note circulation issued by banks. The "Baltimore Plan" of currency reform reduced the tax of 1 per cent. to one-half of 1 per cent. per annum upon the ordinary circulation outstanding up to an amount not exceeding 50 per cent. of the paid-up capital of the bank. It stipulated, however, that a "heavy tax" should be levied upon all circulation in excess of 50 per cent.—75 per cent. of the capital being the maximum issue allowed. In a similar way the plan recently proposed by Hon. Charles N. Fowler, of New Jersey, provided for a gradually increasing tax upon bank circulation based upon assets, in excess of an issue equal to capital and based upon bonds. An expedient of the same sort was recommended by Comptroller Eckels as a means of reducing the volume of a circulation which might otherwise become redundant and inflated. Similar ideas have been put forward by many others. The plan of the Commission

suggests a tax of 2 per cent. on all circulation in excess of 60 and not over 80 per cent. of the capital of banks, and a tax of 6 per cent. on all circulation exceeding 80 per cent. until the limit — 100 per cent. of capital — is reached.

245. It will be worth while to say something of the results of the imposition of a tax such as that under discussion, both when regularly levied, and when imposed only upon emergency circulation. The uselessness of most taxes upon banks as a means of burdening the banks has already been seen; since, in the long run, they will be shifted from the banks themselves to their customers. The intent of a tax upon all circulation above a certain maximum cannot be to force the bank to restrain its circulation within suitable bounds. Such an object would be much better attained by the prohibition of the issue of notes above a certain amount. This is accomplished by the absolute limitation of notes to 100 per cent. of capital.

The tax of 6 per cent. on circulation in excess of 80 per cent. rests upon a recognition of the fact that, whereas the demand of the community for a note-currency is normally more or less definite, amounting to, say, 50 per cent. of the aggregate banking capital of the country, there are times when in consequence of panic or sudden stringency it may rise to a vastly larger amount. When this demand is met by a rigid limitation, the familiar phenomena of panics and crises are aggravated. Such are the times when loans should not be contracted but expanded to meet the sudden and intense needs of the business public. If this wholesome expansion can take place through an enlargement of the note-issues following an increase in the willingness of the community to absorb notes, no harm will be done. The permission to issue above 80 per cent. subject to the tax of 6 per cent. is intended to make possible loans for which borrowers will pay even a high rate of interest, but which would otherwise have been impossible. Were the note-issue rigidly limited to a specified percentage of the capital, conditions might arise under which the limit having been reached, the system would be found unresponsive in time of stringency and currency need. The imposition of a tax which under normal conditions is practically

prohibitory, but which may readily be borne under certain conditions, is preferable to an absolute limitation of the issue to 80 per cent. The notes thus issued will flow back to the bank when the need is past, and not be reissued, since no borrower who is willing to take notes at the high rate of discount necessitated by the tax is likely to present himself. The same notes will not, necessarily, return, but other notes will, and the retirement of these will reduce the circulation to exactly the same extent as a retirement of the emergency issues.

The exact point where normal currency-needs cease, and unusual or panic demands set in, cannot of course be precisely set. Many place it at much lower than 80 per cent. of the banking capital of the country. Certainly the untaxed circulation should be large enough to include the normal amount of notes in use together with those temporarily called out by legitimate seasonal demands. The plan of the Commission has, therefore, suggested a slightly repressive tax of 2 per cent. on all circulation above 60, but not over 80, per cent of the capital, this being probably sufficient to control the increase of notes in times of only slight disturbance.

246. The expedient of a tax on all circulation additional to that required by normal needs is not a new one. Not to give other instances, it exists today in Germany and Austria-Hungary. According to the German banking law all circulation taken out above an allowed circulation of 385,000,000 marks in excess of coin on hand is taxed at the rate of 5 per cent. per annum. The Austro-Hungarian Bank also pays a tax at the rate of 5 per cent. per annum on all uncovered circulation above 200,000,000 florins.

LOANING AND BANKING FACILITIES IN THE SOUTH AND WEST.

247. At the present time the banking institutions of the United States may be divided into five principal classes, national, state, and private banks, loan and trust companies, and savings banks. Of these the last class may be excluded, inasmuch as savings banks are not commercial banks. It may be well to recall the function of these different classes of institutions. As is well known, the organization of national banks with capitals less than $50,000 is not allowed. Much more liberty is permitted in the organization of state banks, but some of the states place a minimum limit of $5,000 or $10,000 to the capitals of these institutions.

Private banks are unincorporated loan agencies which, not being subject to the corporation law, are able to carry on their operations in any way they may see fit. The loan and trust companies organized under state laws have practically the same standing as the state banks. Banking capital generally goes where there are opportunities for making loans, and hence large aggregations of such capital are confined to correspondingly large centers of population. The bank of $50,000 capital cannot find scope for its business in a village of a few hundred inhabitants. It is, therefore, practically confined to towns of considerable size. Yet it is precisely in the very small towns and villages that the issue of notes is demanded, while the use of checks is less popular and less general.

The national banks, however, are the only institutions which can issue this currency, and, by confining them to larger places, by necessitating the organization of banking capital under other laws in small places, and by taxing notes which may be issued under such laws at a prohibitory rate (as is now done by the 10 per cent. tax imposed upon state bank notes), these smaller groups of population are prevented from obtaining their credit

facilities in what is practically the only way in which they could be utilized. They must borrow their currency in other localities and pay for it at a much higher rate of interest than they would otherwise be obliged to pay. Greater flexibility is, of course, found under the state banking laws. Although not allowed to issue currency because of the prohibitory tax, there is a much greater flexibility in the distribution of state banking capital than in that of national banking capital. Even here, however, limits, as already observed, have been set. The bank of $5,000 or $10,000 capital cannot exist in a community where regular customers are so few or so scattered as not to warrant keeping a banking-house open the year round, as must necessarily be the case where institutions are incorporated, and attempt to carry on a regular business. And in somewhat the same way, the institution of private banks is scarcely possible in sparsely settled and poor districts where the possibilities of making unusual profits are not numerous. Furthermore, it seems impracticable to carry on regular banking or loan operations upon capitals of less than $5,000, and hardly indeed upon these.

In the following table (pp. 372–373) have been represented the amounts and kinds of these varieties of banking capital in the several states, as well as the deposits of the various institutions, the circulation of national banks, and the average of the total bank capital, surplus, undivided profits and deposits per capita. The per capita bank circulation has also been added — being computed from the data given in the Comptroller's report for 1896.

248. It seems that the least numerous institutions are the loan and trust companies. Next come the private banks, which are found in comparatively few of the states, and whose capitals are relatively scant and inadequate.

Neither of these classes of institutions, therefore, requires much mention. It is upon the national banks and the state banks that the duty of providing loans seems to fall. As is seen by a glance at the table, the aggregate capital of state banks is in most states nearly equal to, and in quite a number largely in excess of, that of the national banks. In the case of

California, for instance, national banking capital amounts to $7,525,000 only, while state banking capital aggregates $40,660,-938. In Missouri, the relative amounts are $18,915,000 and $20,156,917; in Kansas, $9,812,100 and $8,208,492; in South Carolina, $1,848,000 and $1,392,250; in Virginia, $4,846,300 and $6,241,365 ; and in Kentucky, $13,084,400 and $22,437,936 respectively. This distribution of the banking capital of the Southern and Western states supports very strongly the statements already made, and shows that the investment of banking capital under state laws is preferred to its investment under the national banking act. As already remarked private banks and loan and trust companies play but an insignificant part. As might be expected from what has been previously said, the home or local circulation of the states under discussion is very small. Looking at the column showing circulation it appears that it is but a small percentage of the capital. This is better realized by a comparison with population. As is seen from the last column of the table, the per capita circulation in most of the Western and Southern states is likewise not large. Kentucky, Virginia, California, and one or two others are exceptions, but this is due to exceptional circumstances, and the fact that they are wealthier than the other states. In general, it may safely be said that the figures for per capita circulation show an abnormally low level of bank issues. In Mississippi, for instance, the average bank circulation per capita amounts only to 17 cents, and in many other states it varies from 50 to 80 cents. Few of these states show an average higher than $1.50, and still fewer an average above $2.00.

249. At least two quite distinct points appear from this showing. The Southern and Western states are deficient in two things : banking capital and bank-note currency. These two things, although closely connected and sometimes confused with one another, represent two wholly different aspects of the situation. The one implies a need for long-time loans upon security. The other is a lack of the mechanism by which an economical, convenient and effective currency can be created for the transaction of business.

STATEMENT SHOWING THE AMOUNTS AND VARIETIES OF BANKING CAPITAL IN THE SEVERAL STATES.

	Capital				
	National banks	State banks	Loan and trust companies	Private banks	National banks
Maine	$11,156,000	....	$ 1,460,900	....	$ 15,620,057
New Hampshire	5,930,000	....	....	....	8,824,362
Vermont	6,985,000	....	....	....	8,542,300
Massachusetts	95,377,500	....	10,875,000	....	169,847,167
Rhode Island	19,337,050	$ 916,675	2,816,466	....	19,037,534
Connecticut	22,491,070	2,240,000	1,135,000	....	32,435,961
New York	86,646,060	31,420,700	29,600,000	$ 1,000,700	383,916,460
New Jersey	14,395,000	1,732,300	2,106,345	....	52,139,195
Pennsylvania	74,805,820	8,415,050	39,976,237	1,477,525	232,143,552
Delaware	2,133,985	344,000	500,000	....	4,748,873
Maryland	17,054,960	1,034,750	200,000	146,948	33,110,308
District of Columbia	3,327,000	....	3,250,000	....	13,464,990
Ohio	45,680,100	9,984,325	....	1,603,275	92,019,433
Indiana	14,212,000	4,920,400	1,810,900	2,178,378	29,604,637
Illinois	39,271,000	7,720,000	5,097,500	3,193,504	103,544,296
Michigan	13,159,000	12,561,104	....	554,313	34,968,156
Wisconsin	10,730,000	6,827,750	760,000	1,088,495	33,534,332
Virginia	4,846,300	6,241,365	....	....	13,591,874
West Virginia	3,451,000	3,265,550	....	....	7,100,781
North Carolina	2,766,000	1,997,635	....	306,485	4,869,968
South Carolina	1,848,000	1,392,250	....	....	3,744,481
Georgia	4,116,000	2,856,517	....	48,500	6,634,493
Florida	1,485,000	565,000	....	....	3,911,651
Alabama	3,505,000	464,000	....	137,000	5,727,797
Mississippi	755,000	3,419,314	....	....	2,032,424
Louisiana	3,560,000	2,517,475	....	....	14,081,010
Texas	21,570,000	....	1,040,202	1,725,600	30,552,776
Arkansas	1,220,000	888,682	....	....	1,661,422
Kentucky	13,084,400	22,437,936	....	....	15,640,253
Tennessee	8,275,000	3,359,602	....	....	13,926,620
Iowa	13,495,000	8,964,900	870,797	3,182,980	23,725,111
Minnesota	14,850,000	8,204,500	3,947,426	773,120	31,184,739
Missouri	18,915,000	20,156,917	5,700,000	1,106,200	34,495,276
Kansas	9,812,100	8,208,492	....	....	15,585,139
Nebraska	11,525,000	8,770,590	....	....	17,037,122
Indian Territory	460,000	....	....	76,000	700,066
North Dakota	2,060,000	1,051,500	....	....	5,047,948
Nevada	82,000	....	....	250,000	151,442
South Dakota	1,960,000	1,042,110	....	1,144,592	3,909,709
Utah	1,900,000	1,165,000	....	....	2,586,555
Washington	5,788,000	550,700	....	297,309	6,468,977
Colorado	6,537,000	1,885,000	....	351,800	24,289,416
Oregon	3,170,000	818,550	....	....	7,347,681
Arizona	400,000	237,644	....	....	703,712
California	7,525,000	40,660,938	....	1,153,253	16,181,295
New Mexico	600,000	200,000	....	....	1,930,760
Montana	4,155,000	425,000	....	171,060	11,418,179
Oklahoma	250,000	197,614	....	....	449,041
Wyoming	860,000	72,000	....	164,349	1,865,321
Idaho	675,000	....	....	178,700	1,846,374

STATEMENT SHOWING THE AMOUNTS AND VARIETIES OF BANKING CAPITAL IN THE SEVERAL STATES.

Deposits			Circulation	Total bank capital, surplus, undiv. prof. deposits, av'ge per cap. (excluding savings banks)	Bank circulation per capita
State banks	Loan and trust companies	Private banks	National banks		
....	$ 4,051,376	....	$ 5,684,889	54.61	8.49
....	....	....	3,823,878	41.85	9.73
....	....	....	3,700,130	53.34	11.07
....	89,136,887	....	34,076,083	162.14	13.10
$ 735,468	21,117,888	....	8,001,046	185.87	20.46
5,091,727	6,083,550	....	8,577,274	99.65	10.28
192,672,448	307,351,893	$3,692,866	42,205,787	182.17	6.30
6,723,859	16,843,780	....	5,592,422	59.50	3.08
40,086,517	101,812,081	6,371,614	31,566,911	97.97	5.25
758,489	1,088,971	....	697,414	60.71	3.83
2,638,122	88,095	141,472	5,337,435	57.78	4.77
....	5,079,306	....	1,039,882	96.73	3.66
38,341,722	....	5,196,407	17,753,191	54.68	4.45
9,147,051	427,016	7,008,443	5,639,505	34.00	2.41
23,616,727	18,728,215	7,901,917	7,413,652	56.54	1.72
66,212,786	....	1,500,826	4,771,892	58.33	1.99
26,573,706	363,024	5,070,572	3,199,646	47.34	1.61
14,606,504	....	3	2,146,099	25.63	1.22
10,352,562	....	....	1,236,082	31.09	1.45
3,472,545	....	839,264	905,365	9.03	.52
1,970,371	....	....	623,360	8.42	.50
4,059,158	....	56,563	1,288,378	9.96	.64
1,238,156	....	....	358,605	16.62	.73
538,709	....	508,272	1,229,681	7.37	.74
6,753,758	....	....	233,672	10.57	.17
7,128,618	....	....	1,467,138	26.77	1.18
....	172,152	3,221,918	4,981,459	24.83	1.95
1,527,901	....	....	314,295	4.86	.24
25,557,816	....	....	5,327,662	40.54	2.65
5,589,527	....	....	1,571,477	18.53	.82
15,738,952	4,364,963	5,233,187	4,116,015	40.65	1.97
23,188,344	1.202,412	1,607,390	2,070,041	54.27	1.20
66,935,201	8,556,548	4,960,998	3,053,736	58.56	1.01
14,895,067	....	....	2,718,037	38.65	2.01
13,207,339	....	....	2,523,635	35.81	1.65
....	....	94,823	124,350	6.87	.60
2,483,141	....	....	526,806	31.85	1.55
....	....	434,004	37,302	23.07	.84
1,834,501	....	1,469,408	571,977	22.23	1.02
924,710	....	....	784,381	28.04	2.85
815,498	....	1,041,708	1,274,607	28.00	2.22
3,622,128	....	723,952	1,415,422	67.93	2.38
646,848	....	....	1,059,279	37.69	2.94
703,079	....	....	136,978	33.99	1.98
53,630,156	....	1,039,019	1,687,947	98.79	1.17
334,988	....	....	314,351	18.76	1.77
884,534	....	197,586	828,344	94.67	3.60
259,410	....	....	50,610	8.58	.34
161,771	....	633,325	212,227	42.00	2.23
....	....	170,844	196,665	24.15	1.46

The need for capital to loan on long time is one which must exist wherever the industrial period is prolonged. This is especially true of agricultural industry and kindred occupations which require a much longer period for their performance than do other industrial pursuits. The crop must be planted, raised, and marketed before any return can be obtained. This necessitates a proportionately long period of credit. That is to say, capital must be loaned on long time, and upon a security different from that which forms the basis of the ordinary operations of commercial banking. The agriculturist has only his land with its improvements and his future crop upon which to base the credit for which he asks. Owing to the present organization of the credit and banking facilities of the United States, these facts have frequently precluded him from obtaining credit when he should have had it, and when its extension would have materially assisted in developing the country. Indeed, the whole credit period in Southern and Western districts is much longer than that of more advanced commercial districts. Wages, for instance, are more usually paid monthly than weekly, as is the case in the East. This appears from a consideration of the returns made, in response to the inquiry by the Comptroller of the Currency, in 1896. The usual wages period in the South and West is only an example of the credit-period employed in other transactions. At the present time, for instance, the credits upon which goods are sold in those sections are extremely long, and must necessarily be so where the agricultural class is as a rule but scantily provided with capital, and must rely upon future crops to pay the expenses incidental to the production of them. This need for long-time loans upon security, which, while of undoubted ultimate value, is not to be quickly realized upon, is met in most countries by institutions specially organized for the purpose of extending such loans,—for instance, the Raiffeisen institutions of Germany, or the French mortgage banks. Both of these classes of institutions have for their object to furnish capital to farmers on long time upon real-estate security, and have greatly assisted agricultural development. No similar mechanism for this purpose has as yet been developed in the

United States. The farm mortgage companies have, indeed, entered this field, but many of them have failed. This matter is, however, quite apart from the immediate currency and banking question; though, as will be noted later, the development of a better banking system in the sections in question would do something to attract capital and meet this want.

250. In agricultural communities where population is sparse and business methods are unprogressive, the use of deposit-currency has not developed. Conditions have been such as would scarcely admit of its use. Had the need for note-currency, moreover, been constant, it would probably have been supplied, but the fact that it existed only at certain seasons of the year and not at others has rendered it impossible to keep currency permanently in these regions in a quantity sufficient to meet demands when at their highest. When demand finally became intense and currency was wanted at certain seasons, it was impossible to get it quickly enough, or it could be had only at high rates. The periodicity of agricultural returns has thus necessitated a similar ebb and flow.

It appears from this, that:

1. We have a great number of small communities which are unable to support banks even of the smallest capitals.

2. Such communities demand their currency in the form of notes, not in that of deposits.

3. We have no note-issuing banks of less capital than $50,000, and, so far as the real purposes of note-issue go, no banks of issue.

4. Banks of issue in such communities, even if allowed to issue their notes up to the full value of their capitals, could not, where a deposit of national bonds is required, satisfy the wants of their customers, inasmuch as no bank which loans no more than its own capital can exist, and there is no field for making loans in the form of deposits.

5. There is a lack of the means of extending long credits on slow (although reliable) security. But this is a thing outside the field of our consideration.

BRANCH AND SMALL BANKS.

251. The original national banking law imposed certain restrictions upon the capitals of banks organized under the act. The lowest capitalization allowed was $50,000, but no permission was given for the establishment of branches by larger banks. The method of distributing banking capital to communities in need of it was thus narrowly limited, for to communities which could not support a bank having as large a capital as $50,000 it was impossible to enjoy facilities afforded by institutions organized under the national act. The operation of the act of March 1865, passed soon after the original national bank act went into effect, taxing the notes of state banks at 10 per cent., drove them out of existence. The note-issue function was soon confined to national banks and by consequence — there being no national banks of less capital than $50,000 permitted — to banks having capitals of $50,000 or more. This meant that communities which could not support a bank of $50,000 were debarred from the advantages arising from local banks of issue. It was still possible, however, for communities to have banks with capitals smaller than $50,000 established under state laws. Many of these state systems, too, permitted the organization of branches, yet the benefits of a branch system have not been secured. The many thousand banking offices in the United States are, with a few exceptions, independent institutions, having no direct connection with one another. Branch banking has wholly failed to develop. Bank capital is in nearly every other country distributed largely by means of branch offices. Nowhere save in the United States is there such a multitude of small and unconnected institutions. There is, perhaps, no more striking characteristic of the banking system of the United States than the immense number of banks of low capitalization, and the absence of institutions of large capital with branches.

252. It would seem that there must be a reason for this peculiarity in the banking system of the United States. In searching for this reason, the first fact of importance seems to be that, although the organization of branches has been permitted to the non-note-issuing banks in some of the states, they have not been organized, while in other countries they have been established in nearly every case by note-issuing banks. This seems at once to indicate that in places where notes are the most important medium of exchange a connection of some sort exists between the issue of notes and the establishment of branches.

The inducement to the establishment of branches by banks is, of course, the possibility of profit. But as has already been frequently pointed out, profit can be obtained only by making loans. These when greater than the amount of the capital, as it is necessary that they should be, can be made by the loan of funds left with banks by others or by the issue of circulating notes. It is also clear that, were the possibilities of loaning beyond the amount of the capital wholly or chiefly confined to one of these forms of liability — the other being unavailable, as in the case of the state bank notes whose issue is prohibited by the 10 per cent. tax — and were this other form distasteful or impossible of introduction among the community where the branch was to be established, the motive for the creation of the branch would be absent. This motive has been wanting in many parts of the United States. By the laws of the United States, the issue of notes has been made impossible to all save national banks, and the capital of these banks has been limited to $50,000 as a minimum. Banks other than national must, therefore, be established under state laws, some of which have permitted the organization of such institutions with capitals as low as $5000 or $10,000. They can, however, make use only of deposits as a means of loaning beyond the amount of their capital. But deposits do not provide a desirable form of currency for use in country districts. It follows, therefore, that the state-bank systems supply the deficiences of the national system only in so far as they furnish independent banks of smaller capital than $50,000.

253. Nor would it have been of material assistance had the organization of national banks of capitals smaller than $50,000 been allowed. As the system has worked out, the issue function has been a useless one. The compulsory deposit of bonds to secure circulation has hampered the banks in exercising this function, since the requirement to deposit bonds now cuts off all profit arising from the issue of notes. Moreover, the rural communities are those where interest is highest, and hence where notes can least advantageously be issued under the present system of bond-deposit, owing to the high price of the bonds. These difficulties probably cannot be overcome by the establishment of banks of lower capitals than now exist.

Under the system proposed in this Report not only would capital be introduced into these sections to some extent through the medium of banks of $25,000 capital in many of the smaller towns, but large amounts of additional banking capital would be attracted to the larger places. At the present time bank capital can be more profitably invested in one of the commercial cities of the East, where loans will be made at 5 or 6 per cent., than in Arkansas, where they could be made at 8 or 10 per cent. This is because banking business is done in the East with deposits which are neither taxed nor restricted by the requirement of investment in high-priced bonds. If, however, the issue of notes (which is the form of currency which must be most largely used in the South and West) were put upon the same basis, there would be the same profit in $80,000 of bank notes that there now is in $80,000 of deposits. It would then become more profitable to employ banking capital in the West and South; and the result would be that considerable amounts of capital would be transferred from the East to the West and South, until the lower rate of interest thereby brought about in those sections left the business no more profitable than in the East.

254. If a system of small banks be not feasible,[1] can the desired banking facilities be furnished by the establishment of

[1] On this point valuable suggestions are given by PROFESSOR DUNBAR, of Harvard ("The National Banking System," *Quarterly Journal of Economics*, October 1897, pp.

branches of larger institutions? This question remains to be discussed. It may be divided into two parts: (1) Would a system of branch banks be introduced, if its establishment were permitted? and (2) would it, if established, meet the wants already outlined? To these may be added an inquiry whether or not such a system, even if it met such wants, would have a good effect upon the general banking organization of the country.

Whether or not branches will be organized if their establishment be permitted is solely a question of profitableness to the bank—a question of comparative advantage and disadvantage.

It has already been seen that the form of liability which would be used in rural communities is the note. In the main the reverse is true of cities and commercial communities. Here the note has but a limited field—the larger part of the circulation being usurped by the deposit to the exclusion of the note. The bank is thus unable to extend its loans by means of notes; in other words, one of its sources of profit is cut off. When the whole field for credit operations is occupied in the city, the city bank could often with perfect safety go much

12–13). "The fact appears to be that banks of $25,000 capital would be almost as completely beyond the means of a majority of the small village centers in sparsely settled districts as banks of $50,000 are now. . . . . With not far from thirty-seven hundred banks already in operation, the United States evidently has in hand a task such as no government ever before undertook, and the difficulties of this task would increase with the further pulverization of capital now suggested. The records of failures show that even in large banks the close attention of directors is not always easily had, but with banks of the smallest class in small villages, not only is there increased difficulty in making it worth the while of directors to give the requisite attention and thought to what is, after all, a matter of but trifling importance to any one individual, but there is also the often experienced embarrassment in finding among the business men of a village the material for making up a competent board. The best promise of good management is afforded by a bank with an immediate constituency large enough to supply an ample choice of men, and with a capital large enough to secure the pressure of a full sense of responsibility and to demand a reasonable share of time and care from an unpaid body of men. In short, any change in capital should be in the direction of consolidation rather than subdivision. The smallest class of national banks now in existence should shrink, and the extension of the system should be effected by banks of more considerable capital, if we are to move towards the most efficient and safe organization. As for the suggestion that such a movement would mean diminished competition and the "concentration of the money power," a system of thirty-seven hundred members would afford ample scope for healthy consolidation long before the danger point could come into view."

farther in its business were it possible to open a new demand for loans. Precisely the new field which it desires can, however, be opened by the establishment of branches in communities which use notes, and whose demand will supplement that of the city constituency by permitting the use of the bank's liability in another form, thus enabling it to obtain a larger profit by increasing the total of its operations. A large volume of notes can be kept in constant circulation in outlying districts with practically no additional strain upon the bank. A system of branches, too, will enable it to receive a much larger volume of deposits by bringing its sub-offices into many communities where funds are lying idle. These again can be redistributed by the branch system to regions where funds are scanty, used as a basis for loans, and the whole business of the community thus be greatly stimulated and extended. This facility for receiving deposits and redistributing the supply of loanable funds where it is most needed is one of the most important functions of banking.

Moreover, such a system would partially do away with the evils arising from the present system of country deposits with city banks. Funds received on deposit, which could not be utilized where they were received, would be deposited in places where they could be loaned to those who require them. These loans would be controlled by the head office of the institution itself, which would have direct and intimate information concerning all the operations of the branch, and which would thus be able to know in advance exactly when the branches would have need of their funds. There will thus be no danger of an unemployed reserve in the vaults of country banks, while, on the other hand, these branch banks will at all times be able to grant accommodations within prudent limits. There will be more confidence in a bank with wide connections, and, consequently, much less danger of sudden and violent demands on it for funds. Again, the opportunities for detecting frauds and gaining information as to the character of discount paper under a branch system are somewhat greater than under one of independent banks. For example, two borrowers may be endorsing one another's paper very largely. This would be scarcely likely to be found

out under a system of individual banks, whereas under a system of branches there would be more probability that it would be discovered.

255. As against these advantages one or two countervailing disadvantages are to be noted. The establishment of branches must necessarily lead to a considerable extension of liability. Bad management of a branch, even if only temporary, may lead to a run on the branch and result in a run on other branches, ending in the ruin of the institution. The history of banking has, however, shown that institutions are more likely to fail from unwise management of the head office than of the branches. The objection just indicated, moreover, applies quite as strongly to any extension of the business of the head office itself. In general it may be said that the system of branches is not very likely to lead to undue extension of liability.

Closely connected with the foregoing is the disadvantage arising from the difficulty of controlling branches. It would be impossible to prescribe rules for the guidance of a branch such that the manager would have no direct part in the conduct of the business. Much reliance must, therefore, be placed upon his ability.

Some have further contended that the expense incident to the establishment of branches would be a great obstacle in the way of the development of a branch bank system. This plea, nevertheless, does not seem to have much weight. It is clear that the expense of establishing and conducting the branch will at least be less than that of carrying on an independent bank. Branches can, therefore, be located in towns where independent banks cannot exist, and where, were it not for the branch system, there would probably be no banking office of any sort. Furthermore, the expense of carrying on branches need not be great. There are many branches in England and Scotland where the office is open but one or two days in the week, being conducted by some clerk who is sent over from a neighboring town. There the expense must be exceedingly small, and yet the advantages of banking facilities are thus carried to the very smallest groups of population.

It is sometimes maintained, too, that the branch system necessitates the holding of a greater quantity of cash than would otherwise be the case. This argument, however, appears to be ill founded, as may be seen from the following table, which displays:

THE POSITION OF THE ENGLISH JOINT-STOCK BANKS ON OR ABOUT NOVEMBER 30, 1891.[1]

Name of bank	Number of branches	Liabilities on deposits and current accounts	Cash in hand and at bank of England	Proportion of cash to deposits	
				Nov.	Oct.
				Per ct.	Per ct.
Alliance	13	$4,376,629	$555,219	12.6	12.6
Capital and Counties	103	11,062,980	1,319,048	11.9	11.6
City	12	5,871,907	787,278	13.4	15.1
Consolidated	10	3,247,280	459,785	14.1	12.1
Imperial	7	3,715,392	555,452	14.9	11.2
Lloyds	89	20,620,489	2,842,357	13.8	12.7
London and County	141	33,183,442	3,723,941	11.2	9.9
London and Midland	53	8,111,512	1,161,929	14.3	14.4
London and Southwestern	88	5,183,326	801,036	15.4	14.4
London and Westminster	15	23,974,988	4,335,382	18.0	15.4
London Joint Stock	8	10,835,809	1,080,873	9.9	10.8
National Provincial	153	40,263,005	4,418,992	10.9	10.9
Prescott Dimsdale	8	3,640,092	508,626	13.9	14.3
Union	5	12,080,662	2,113,321	17.4	15.4
Williams Deacon	33	9,373,428	1,112,993	11.8	11.2

[1] ATTFIELD, "The Branch Bank System."

It appears from this showing that it is by no means the banks having the largest number of branches which require the largest quantity of cash on hand, nor does there seem to be evidence to the contrary.

256. After all, however, there are considerations of fact stronger than the theoretical arguments just set forth, which go to show that branches will be established by strong banks where permitted. A branch system exists in nearly every country of the world except the United States. In France there is at the present time a widely extended system of branches. Although the Bank of France is not compelled by law to maintain more than one branch in each department, there are now many more than this number, the Bank having established others of its own

volition. Other French institutions have likewise established large numbers of branches. As appears from the table given above, England also has a widely extended system of branch banks. About 1,000 branches have been established in Scotland by only 10 banks. Canada with 38 banks has an extended network of some 500 branches, and the branch system is to be found in Germany—where the Reichsbank has over 240 branches—Italy, Russia, and even in Persia and India. The Bank of Belgium has 40 agencies. In Switzerland 12 out of the 34 banks have branches. The Bank of Sweden has 12 branches; that of Greece, 26; that of Portugal, 20. There can be no doubt that the branch system offers sufficient inducement to banks to guarantee its establishment.

257. Assuming then that the establishment of a system of branch banks would be practically assured, could it be permitted subject to proper regulations, it remains to enquire whether such a system would overcome the lack of banking facilities which now exists, and, if so, how far and in what way. It has been seen that the lack of banks is one which exists chiefly in the very smallest of the towns and villages of the United States, where the use of deposit-currency is unfamiliar or impracticable, and where loans must consequently be extended by the issue of notes. This does not mean that the note function is one which could not well be used in larger places. It is, however, in the places wholly debarred from banking facilities of any sort, through their inability to make use of deposits, that the need is greatest. It has also been shown that branches can generally be established at considerably less cost than independent banks, since it is not necessary to appropriate to the branch a capital, independent of that of the parent institution, which may be partially inactive at certain seasons. As in the case of all other institutions which operate in competition with small independent establishments, branches can be conducted at less expense. It thus appears that there is every reason to believe that branches could be operated at less expense of management than can independent banks, while the fact that they can issue notes where these are wanted, upon the basis of suitable security, avoids the

necessity of borrowing currency from banks in other portions of the country, and thus saves to the rural community the interest necessarily paid by one bank to another. Under the influence of the keen competition now existing between banks, all this saving in expense would mean a corresponding saving in the cost of loans to borrowers, that is to say, it would in the end result in lower interest. This in itself would be a more than sufficient reason for the introduction of the branch system, but there are others which merit consideration.

There are several advantages directly arising from the establishment of branches which cannot be obtained by any other mechanism. The branch system affords to customers vastly greater facilities for receiving and paying money. It is of great advantage to merchants to be able to draw checks payable at a large number of places. The prejudice against "local checks" is in this way largely overcome, and the same object as is attained by the arrangements between banks is reached in a much more complete as well as less expensive way. Charges for cashing checks of other banks are thus to a considerable extent avoided. In some countries this process has gone so far that banks are able to compete with the Post Office in remitting money. In paying and receiving money the increased convenience of branches can hardly be overestimated. The use of checks, payable at commercial centers, by persons in outlying districts is very advantageous. Likewise, where collections are being made over an extended country, it is of great advantage for agents to be able to deposit with branches and transmit their deposits to the chief office of the bank. Analogous to this is the ease with which amounts may be received by branches for credit of customers at other offices.

Another advantage which will be derived in this fashion from a branch system may be seen by reference to the experience of the other countries whose example has already been briefly referred to. Canada, for instance, with an immense territory, with resources far less than those of the United States, a sparse population, and much smaller supplies of banking capital, has, by her system of branches obtained a rate of interest vastly more uni-

form and stable, and on the average somewhat lower than that prevailing in our own country.

258. It may be objected that a system of branch banking is likely to operate unfavorably to the general organization of the banking system of the country. The branch bank system with its extended liability, some may say, is likely to be prolific of failures. Others maintain that it is likely to lead to a highly centralized system of banking and must result in the destruction of most banks of small capital. An appeal to history, however, proves both of these statements incorrect. The liability to failure cannot be greater under the proposed than under the present system. A branch system implies a much greater capital in the hands of a single corporation or individual than does a system of independent banks. This generally means a correspondingly more competent management, while on the other hand the greater resources of the bank will inspire correspondingly greater confidence, and in case of rapid withdrawal of deposits at any of the branches there are large supplies of coin which, by means of modern transportation facilities, can easily be made immediately available. In general, then, it may be said that the branch system conduces to the solidity of the general banking organization.

There remains the argument that a system of large banks with branches is likely to lead to monopoly and to the elimination of banks of the smaller grades of capital. A conclusive judgment on this argument would be difficult. No other country has a system of numerous independent banks of small capital like that of the United States, and a conclusion drawn from experience is, therefore, impossible. Further, while, as has been seen, the expense of conducting branches in small places is likely to be less than that of carrying on independent banks in such places, it is by no means clear that this saving in expense exists when we compare branches with institutions located in larger towns and possessing capitals of moderate size. In most communities there would always be a field for an independent bank of small capital as well as for branches of larger institutions. Certain functions of the independent bank could not always be properly performed by the branches. Even if, however, this were

not the case, it would still constitute no objection to the branch system. Even if independent banks must disappear in the face of the new system, this could come about only through the elimination of the institutions less fit to perform given services for the community at least cost to it. No form of capital is so fluid as banking capital; consequently none is so well fitted for perfectly free competition. When we seek to ensure free competition in other lines of trade and industry there is no reason why the same policy should not be followed in the case of banks. There is no reason why any class should be permitted to maintain a monopoly privilege at the expense of the community, when the service rendered by the institutions so protected can be better and more cheaply performed by others.

It may be convenient to sum up briefly the main points in the foregoing discussion. It has been seen that the needs of the South and West in the matter of credit facilities are of two distinct kinds: (1) a larger supply and better distribution of loanable capital; and (2) better means of utilizing such capital to the best advantage. The first of these wants will under the Commission's plan be met by three distinct methods. (*a*) By the introduction of smaller banks than now exist, independent note-issuing institutions of limited capital can be secured by such communities as have need of them. (*b*) Permission to establish branches of larger institutions will carry banking advantages to very many regions which would otherwise fail to obtain them, and will enable each bank to make its capital much more efficient than at present. (*c*) By making it possible to employ banking capital to the best advantage, through the freer issue of notes, in regions where banking is now unprofitable much new capital in the form of loan funds will be turned toward places where it is now scarce or wholly wanting. The second need already mentioned—that of better means of utilizing existing bank capital—has been shown to be tantamount to a need for a convenient and elastic note-currency. This it is a prime object of the Commission's plan to provide.

PART III

DEMAND OBLIGATIONS OF THE GOVERNMENT

GOVERNMENT- *VERSUS* BANK-ISSUES.

259. If the medium of exchange of a country were solely coin, it is evident that an amount of the country's wealth equal to this coin must necessarily be invested in its mechanism of exchange. If, however, any means be devised for economizing the use of coin, a saving will be made in that proportion to the community as a whole. If less wealth is put into the mechanism of exchange, a proportional amount is freed to be used for the active purposes of production. The question may naturally arise, to whom should the privilege be granted of economizing the medium of exchange and to whom should go the saving arising therefrom. This point was long ago discussed by Ricardo:

"The advantage will always be in favor of the issuers of paper; and as the state represents the people, the people would have saved the tax if they, and not the bank, had issued this million [of paper]."

Although as a matter of abstract theory this position may seem undisputed, the difficulties which surround the policy of issuing notes by a government have led to a general agreement that such a policy is dangerous, and should never be entered upon. For this reason Ricardo[1] himself was led to oppose the issue of notes by the state:

"I have now shown that the public would have a direct interest that the issuers should be the state, and not a company of merchants or bankers. The danger, however, is that this power would be more likely to be abused, if in the hands of government, than if in the hands of a banking company. A company would, it is said, be more under the control of law, and although it might be their interest to extend their issues beyond the bounds of discretion, they would be limited and checked by the power which individuals would have of calling for bullion or specie. It is argued that the same check would not be long respected, if Government had the privilege of issuing money; that they would be too apt to consider present convenience rather than future security and might, therefore, on the alleged grounds of expediency be too much inclined to remove the checks by which the amount of their issues was controlled."

[1] *Works* (ed. McCulloch), p. 219.

260. Even if a saving to the country might be made by the issue of government notes as an economy in the use of coin, the history of money is full of warnings against such a policy. Quite invariably has the abuse of the issue function by the state followed its adoption. Why this should be so is not hard to explain. The fundamental difficulty arises in connection with the reasons which induced the first issues. As a rule, governments have issued paper money solely because the treasury was empty and to meet a purely fiscal necessity. Without reserves, the paper from the start is inconvertible and depreciates, thereby throwing into confusion the standard of prices and payments. Consequently, without effectively supplying its fiscal needs, such an issue produces uncertainty and speculation for the trade of the country. Because the treasury is a borrower it should not issue a credit money, and overturn the whole basis of production and trade; exactly because it is a borrower the Treasury should endeavor to keep business in a normal state, so that it could most easily obtain loans. In such circumstances the government has behind the paper no property immediately realizable in cash with which it can redeem its notes on demand.

The initial situation of a bank and the government treasury in these two cases is very different. The bank, by the very nature of the banking business is obliged to have a dollar of resources for every dollar of liabilities; the government has not a dollar of resources for any of its note liabilities. The difference between the two cases can be seen distinctly by the following accounts. The first is that of a bank:

LIABILITIES.		RESOURCES.	
Capital, - - -	$100,000	Loans, - - -	$ 50,000
Notes, - - - -	50,000	Cash reserve, - - -	100,000

In this case a new bank with a capital of $100,000 which was paid up in cash started out by making loans to the amount of $50,000 which were met by a note liability of $50,000. It is evident at a glance that, besides its whole cash reserve, for every note issued it had a corresponding amount of property in its resources under the head of loans.

Contrast this operation with that of a government issuing paper money:

LIABILITIES.		RESOURCES.	
Capital, - - -	———	No property held from issue of notes, - - -	———
Notes, - - - -	$50,000	Cash reserve to be raised by taxes, - - -	———
	———		

In this case there is nothing corresponding to the capital put in by the bank. Consequently there would be no cash reserve previously supplied. This can be got only by taking it in new taxes from the country; and, as we have constantly seen in the experience of the United States, great difficulties have arisen in providing this reserve in sufficient amount. Also, having no capital as the foundation of its business, if fifty thousand dollars of notes are issued as a demand liability, the government by the very process of paying them out, unlike the bank, does not secure for every note issued property which is retained in its reserves to be realized upon to meet its note obligation. On the contrary, whatever property has been received for its notes has been dissipated in military or civil expenditures or possibly in public buildings, which are, in the nature of the case, absolutely unavailable as a means of meeting notes on demand in cash. As contrasted with the condition of a bank which issues notes, the position of a government is lamentably weak. If the bank directors had used the property entitled loans behind their note-issues, in the first account, to buy champagne or cigars, then the bank would be situated more nearly in as helpless a condition as the treasury in regard to the security for their respective issues. But even then the note-holders would have the paid-in capital of the bank to fall back upon, while the treasury affords no such present resource. By the mere issue of its forms of debt the government has no magic power of creating property; but by the very fact that bank-notes are the outcome of the business transactions of the country, the bank holds a corresponding value until the note liability is extinguished. The reason why banks rather than the government should issue notes lies in the fact that banks are the only institutions dealing with the live trans-

actions of a country's industry and trade. The issue of government paper is authorized by legislators who are never under any present responsibility of private loss in case of bad judgment or mismanagement; on the other hand, the penalty for imprudent issues, or mismanagement, in the case of bank-issues is visited by disaster directly upon the property of the issuer.

261. As has been explained in Part II, bank-notes under a proper banking system, can be easily expanded in proportion to the demand of the community for them, and, under a proper method of redemption they cannot remain outstanding in excess of the needs of trade. That is, they are properly elastic. On the other hand, by the very nature of the government, by the very fact that it is not a bank, it is impossible that it should know how much circulation the country needs, when to increase and when to contract it. This was seen as long ago as December 13, 1790, by Hamilton when he said that "Among other material differences between the paper currency issued by the mere authority of the government and one issued by a bank payable in coin is this: that in the first case there is no standard to which an appeal can be made as to the quantity which will only satisfy, or which will surcharge the circulation; in the last, that standard results from the demand. If more should be issued than is necessary, it will return upon the bank."

262. The power of the state to tax is only a distant resource for the ultimate redemption of its obligations, which would absolutely fail to provide for their redemption on demand; therefore, its notes might, as they did for seventeen years—to our dishonor be it said—go to protest before funds would or could be collected. The vague security of the general credit of the United States behind its obligations is too misty to deserve consideration, if actual coin may be demanded at sight. The fiscal and monetary operations of a state should be kept entirely separate. A money not directly realizable in property is a lie. In the case of bank-notes, property precedes and creates the note liability; in the case of government paper, the credit-issue precedes property, and in private affairs would be termed mere speculation. Therefore, the demand obligations of the Treas-

ury should never be issued as money, least of all in such a way as to cast any doubt on the maintenance of the metallic standard ; but since they have been used for money for many years in such a way as not only to drive out gold, but to serve as a vicious and fluctuating standard themselves, their very existence is a reminder of this abnormal abuse, and they should be removed beyond all possibility of future temptation.

The quantity of paper money used as media of exchange should increase or decrease with the needs of trade. Through their discounts the banking institutions of a country alone are able to know when trade and industry require more money, and when to provide it. For the very reason that a government is a government and not a bank, because it is not discounting for actual business transactions, it cannot by any remote possibility know how much of the medium of exchange to issue.

263. Inasmuch as the idea of the credit of the country, unaccompanied by direct regulations for obtaining coin, is quite too vague for practical purposes, the only means of preserving the value of notes is by directly providing sufficient reserves for their redemption. If these reserves should for any reason prove insufficient, distrust will be created as to the value of the paper and consequently—which is of vastly greater importance—as to the standard of prices and contracts in the whole country. It often happens that the maintenance of this reserve is dependent upon the political caprice of parties in Congress, or upon the accidents of governmental revenue, or upon possible deficits, so that passing influences of no great importance in themselves, by producing an effect upon the reserves, are able to cause a disturbance of confidence in the ability of the government to maintain the existing standard and thereby to send a shock through the whole business fabric of the United States. It should be borne in mind, in regulating the relation of reserves to demand liabilities, that the government has no power, as have the banks, to control the amount of its reserves by the device of raising or lowering the rate of interest upon its operations with the public. That is, having demand liabilities, the government is under the necessity of resorting to a

banking device in the form of reserves, and yet, because it is not a bank, and because it is not making loans and constantly having maturing notes paid off, it has no means, as have the banks, of controlling the quantityof its reserves. If it be said that the government can obtain gold for its reserves more easily than the banks, it is to be remembered that, whenever the government needs gold, it must always be obliged to go to the commercial centers and consequently, to the banks, to obtain gold in any considerable amount, in a time of emergency.

264. If the paper issued by the government is not always kept promptly redeemable in specie, it will depreciate. We had a long and lamentable experience of this sort for seventeen years. The greatest objection to a system like this of supplying the media of exchange for the country is that it leads to wrong thinking on the subject of money. When no reserves are kept behind the notes, people naturally come to believe that the mere stamp of the government gives a worthless piece of paper a value, instead of reflecting upon the fact that this value arises from the belief that in the future the promise to pay will be properly honored. If the banks had provided these notes under a system which put upon them the expense of maintaining the notes at par, all these heresies might have been escaped.

To this source is to be attributed the idea that more money is needed when, in fact, what is needed is more wealth or property. And out of the inclination to look to the government for help in times of stringency, or when prices are supposedly too low, has arisen the socialistic tendency to use the government as an agent for the redistribution of property by issuing money of a kind which will raise prices. If, by using the power of the government to issue paper, a depreciated standard can be introduced, prices in the depreciated paper would rise, and debts could be scaled. The destructive influences following from the issue of the greenbacks in stimulating these socialistic tendencies have been already widely felt, and their existence forms a strong argument against entering into or maintaining a policy of government issues.

265. One reason why the issue of paper by the govern-

ment is so certain to be abused is found in the fact that a government cannot be held responsible for not fulfilling its promises, as can a bank. Should the government fail to redeem its promises to pay coin for its paper money when presented, there is no power in law by which anyone can enforce his rights. In case a bank refuses to fulfill its promises, a citizen can draw to his support all the powers of law and the courts, to force the bank to meet its demand obligations. Thus, in the case of the government, no responsibility for meeting its paper promises can be enforced ; while, in the case of banks, the knowledge is always present that this responsibility must be met. Hence banks would be obliged to redeem their notes at the risk of their very existence. These are reasons why, under a proper system of banking, the issue of notes is much less likely to be abused than if allowed to the government.

266. It may suffice, in conclusion, to call attention to the relative advantages of government and bank paper presented in 1861 by Secretary Chase, whose previsions were so strictly fulfilled in the subsequent history of the United States notes and of the national banking system :

"Two plans for [providing a national currency] are suggested. The first contemplates the gradual withdrawal from circulation of the notes of private corporations, and for the issue, in their stead, of United States notes, payable in coin on demand, in amounts sufficient for the useful ends of a representative currency. The second contemplates the preparation and delivery to institutions and associations of notes prepared for circulation under national direction, and to be secured as to prompt convertibility into coin by the pledge of United States bonds and other needful regulations.

"1. The first of these plans was partially adopted at the last session of Congress, in the provision authorizing the Secretary to issue United States notes, payable in coin, to an amount not exceeding $50,000,000. That provision may be so extended as to reach the average circulation of the country, while a moderate tax, gradually augmented, on bank notes, will relieve the national from the competition of local circulation. It has been

already suggested that the substitution of a national for a state currency, upon this plan, would be equivalent to a loan to the government without interest, except on the fund to be kept in coin, and without expense, except the cost of preparation, issue and redemption; while the people would gain the additional advantage of a uniform currency, and relief from a considerable burden in the form of interest on debt. These advantages are, doubtless, considerable; and if a scheme can be devised by which such a circulation will be certainly and strictly confined to the real needs of the people, and kept constantly equivalent to specie by prompt and certain redemption in coin, it will hardly fail of legislative sanction.

"The plan, however, is not without serious inconveniences and hazards. The temptation, especially great in times of pressure and danger, to issue notes without adequate provision for redemption; the ever-present liability to be called on for redemption beyond means, however carefully provided and managed; the hazard of panics, precipitating demands for coin, concentrated on a few points and a single fund; the risk of a depreciated, and depreciating, and finally worthless paper money; the immeasurable evils of dishonored public faith and national bankruptcy; all these are possible consequences of the adoption of a system of Government circulation. It may be said, and perhaps truly, that they are less deplorable than those of an irredeemable bank circulation. Without entering into that comparison, the Secretary contents himself with observing that, in his judgment, those possible disasters so far outweigh the probable benefits of the plan, that he feels himself constrained to forbear recommending its adoption.

2. "The second plan suggested remains for examination. Its principal features are: first, a circulation of notes bearing a common impression, and authenticated by a common authority; second, the redemption of these notes by the associations and institutions to which they may be delivered for issue; and, third, the security of that redemption by the pledge of United States stocks, and an adequate provision of specie.

"In this plan the people, in their ordinary business, would find

the advantages of uniformity in currency; of uniformity in security; of effectual safe-guard, if effectual safe-guard is possible, against depreciation; and of protection from losses in discounts and exchanges; while in the operations of the Government, the people would find the further advantages of a large demand for Government securities, of increased facilities for obtaining the loans required by the war, and of some alleviation of the burdens on industry through a diminution in the rate of interest, or a participation in the profit of circulation, without risking the perils of a great money monopoly.

"A further and important advantage to the people may be reasonably expected in the increased security of the Union, springing from the common interest in its preservation, created by the distribution of its stocks to associations throughout the country, as the basis of their circulation.

"The Secretary entertains the opinion that if a credit in any form be desirable it is most desirable in this. The notes thus issued and secured would, in his judgment, form the safest currency which this country has ever enjoyed; while their receivability for all government dues, except customs, would make them, wherever payable, of equal value as a currency in every part of the Union. The large amount of specie now in the United States, reaching a total of not less than $275,000,000 will easily support payments of duties in coin, while these payments and ordinary demands will aid in retaining this specie in the country as a solid basis, both of circulation and loans."

HISTORY OF THE UNITED STATES NOTES.

267. From the establishment of the Constitution to the Civil War the United States never made anything a legal tender but gold and silver coins. No issues of paper money were ever resorted to. In this early period, however, the Treasury for fiscal reasons had issued Treasury notes or short-time obligations, at first drawing interest, and of large denominations. But these notes, being somewhat of the character of a short-term bond, were never made a legal tender. And yet — to show how easy it is for governments to cross the line between fiscal and monetary operations — it was not long before these fiscal devices were issued payable on demand, without interest, and of small denominations. But in no case were they intended to be more than a temporary instrument for securing funds, and were either speedily refunded or paid off.

The issue of government obligations of low denomination, receivable by the government for dues and called Treasury notes, for the purpose of raising funds was made use of as early as 1812. In June of that year, the government for the first time in its history issued its obligations in low denominations. These Treasury notes of 1812 were at first intended merely to anticipate revenue and ran for one year only, with interest at $5\frac{2}{5}$ per cent. A further step toward making the notes similar to currency was, however, taken in 1815 when notes even lower in denomination than those of the preceding issue, bearing no interest, and payable to bearer on demand, were put into circulation. These notes were fundable into 7 per cent. bonds, and were converted almost at once. None of the issue of 1812 were ever used as a currency, and of the issue of 1815 only a small amount of those of lower denominations. Even these, as just remarked, remained out but a short time. No legal-tender quality was ever bestowed upon any of the notes.

The precedent thus established for the issue of Treasury

notes was followed in 1837–1843 and again in 1846 and in 1857. Finally, Treasury notes were once more resorted to in 1860–1.

In December 1860, Secretary Chase obtained $5,000,000 by the issue of Treasury notes. Still the plan of obtaining money by the use of this particular form of government obligation had not become a fixed policy for raising the large revenues which, it was foreseen, would be needed. The question whether or not Treasury notes were a desirable means of raising revenue came up in connection with a loan of $8,000,000 for which Mr. Chase asked bids on March 22, 1861. The comparative advantages of bonds and Treasury notes were well stated by Mr. James Gallatin at the time. "In the form of stock," he wrote to Secretary Chase, "this loan will be funded and out of the way for twenty years; but in the case of Treasury notes, should sudden panics arise in the uncertain future, these would be thrown in upon you for duties, and most likely at a moment when you would be heavily pressed for means to carry on the government, they would aggravate the embarrassments of the Treasury." He therefore advocated the use of bonds in preference to Treasury notes as a means of obtaining revenue. Secretary Chase did not fully accept the advice thus offered by Mr. Gallatin. Nearly $5,000,000 of the $8,000,000 of the loan was borrowed by the issue of Treasury notes, $1,684,000 more were issued in May, and, prior to the meeting of Congress July 4 1861, nearly $12,600,000 additional.

268. At the session of Congress just referred to, the Secretary was authorized in an act signed by the President, July 17, 1861, to borrow $250,000,000 either in bonds, or Treasury notes, in such proportion as he might think fit. Authority was granted to issue these Treasury notes of denominations not less than ten dollars, and they might either be payable on demand and bear no interest or be payable in one year and bear interest at the rate of 3.65 per cent. "The Secretary of the Treasury," ran the act, "may . . . . issue in exchange for coin, and as part of the above loan, or may pay for salaries or other dues from the United States, Treasury notes of a less denomination than fifty dollars, not bearing interest, but payable on demand." It was

under the authority granted by the terms of this act that the issues of the so-called "old demand notes" took place. The amount of these demand Treasury notes was, however, limited to $50,000,000.

The lowest permissible denomination of which Treasury notes could be issued was, however, altered to $5 by act of August 5, 1861, and early in the latter month the first of the "demand notes" bearing no interest were paid out in Washington. From the outset the notes were unpopular. People received them reluctantly, and it was hard to force them into circulation. The Secretary and other officers of the Treasury, in the effort to give credit to the notes, signed a paper agreeing to accept them in payment of their salaries. The banks of New York and of other places did not regard the notes favorably, partly because they tended to drive bank-notes out of circulation, and partly because some fears concerning their immediate redemption were entertained. Many of the banks refused to take them at par, but inasmuch as they were payable to the government, they soon came to be preferred to bank-notes, and later, during the "greenback" experience, were often worth about the same in legal tender notes as was gold. At the close of the fiscal year 1861, about $33,500,000 of demand notes were in circulation. The real danger in this whole experience was that the notes, whose character had imperceptibly been changed from that of a short-term bond to something like that of currency by being made non-interest bearing and payable to bearer on demand, would degenerate into an issue of irredeemable paper money. The really dangerous form of the Treasury note was thus the so-called "demand note" of which, as already seen, $50,000,000 (denominations lower than $50, but not lower than $10) had been authorized by the act of July 17, 1861. They were, however, not an invention of Mr. Chase's, but distinctly an outgrowth of the older issues which have been reviewed. Although not a legal tender, the Secretary, it will be remembered, might pay them out for "salaries or other dues from the United States,"[1] and did actually

[1] By the act of August 5, 1861, it was provided that the notes should be of denominations not less than $5 and should be receivable for public dues. February

do so. The total amount of Treasury notes issued to this act of July 17, 1861, was as follows:

To 1815,	$28,318,400
In 1815,	8,362,394
1837–43,	47,002,900
1846–57,	86,588,800
1860–61,	45,375,350
Total,	$216,575,978

269. It was seen to be impossible, however, to obtain the whole of the revenue required by the Treasury through the issue of demand notes. Large sums of money were imperatively needed at the outset of the war, and as already seen, authority to issue bonds as well as Treasury notes had been given to the Secretary at the time when the demand notes had been authorized.

It had been foreseen, moreover, that the provisions of the Independent Treasury act, by which the government was forbidden to deposit its revenues in banks might interfere with the placing of loans, if it were certain that the borrowing of such immense sums would drain the banks of their specie. The act passed August 5, 1861, had, therefore, relaxed the provisions of the Independent Treasury act so far as to permit the Secretary "to deposit any of the moneys obtained on any of the loans . . . . in such solvent specie paying banks as he may select." The prospect of success in placing a popular loan, it must be admitted, was not good. People were anxious and uncertain of the future, and, in many quarters, patriotism was not fully aroused. It seemed probable that the best chance of obtaining the needed funds lay in a loan placed with the banks of the

12, 1862, while the legal tender act was being prepared, $10,000,000 more in demand notes were authorized. The whole $60,000,000, however, were to be taken up by being exchanged for legal tenders. "The demand notes were paid in gold when presented for redemption and they were received for all public dues and these two qualities prevented their depreciation. All other United States notes were depreciated in value from 1862 until the resumption of specie payments . . . . These notes were not legal tender when first issued but they were afterwards made so by the act of March 17, 1862."—*United States Treasury Department Circular, No. 123*, July 1, 1896, pp. 9–10.

country, and, in the opinion of Mr. Chase, an issue of low denomination Treasury notes. Fortunately, however, the banks, at least in the East, were exceptionally strong and rich in specie. The crops of recent years had been immense, and the outlook for good crops in the coming autumn was encouraging.

The chance of obtaining a loan from the banks was thus better than might have been expected. Inasmuch as it seemed impossible to secure the coöperation of western institutions, upon the invitation of Secretary Chase a consultation with the principal eastern bankers took place in New York between the 10th and the 17th of August. With many misgivings and doubts on the part of the banks as to the success of the scheme, an agreement was entered into between the Treasury and the associated banks to float a loan of $150,000,000, of which $50,000,000 were taken at once, about August 15, with an option on another $50,000,000 on October 15, and on the last $50,000,000 on December 15. The first two blocks were put out in the form of 7-30 Treasury notes, running three years; the last $50,000,000 were issued in the form of 6 per cent. bonds (at such a price as would be equivalent to 7-30 notes, or about 89). The payments for the bonds were to be made to the Treasury in coin, as called for.[1] The banks were to make the advances, hoping from the sale of the bonds to the public to obtain the coin with which to take up the successive blocks. The funds realized upon the disposal of the first block to the public, it was intended, should be available for payments to the Treasury for the second block;

[1] The banks were most anxious that Mr. Chase should avail himself of the permission accorded by Congress (August 5, 1861) to deposit the proceeds of his loans in the banks. If the government had paid its debts by checks on its funds with the banks, there would have been no withdrawal whatever of large sums from the reserves of the banks, which would be placed out of the reach of the public. A subscription to bonds would have been paid by a transfer of a deposit to the government; the latter would have paid its debts by a transfer of this deposit to its contractors, or creditors; and no sums of specie need have been sent by the banks to the Treasury with the consequent doubt as to its early return. This plan was not accepted by Mr. Chase. George S. Coe, who played a leading part in the negotiations, afterward observed in a letter to Elbridge G. Spaulding, who drafted the legal tender bill, that he believed that the banks "would have conferred an incalculable benefit upon the country had they adhered inflexibly to their own opinions." Only the pressure of events led them to give way to the views of Mr. Chase.

and those from the second block for the third. The weak point in the plan was this: the rate of interest and the term of the bonds being fixed, and the banks having taken them at a definite price, whether they could be sold to the public, or not, depended on whether the opinion of the public as to the credit of the government exactly coincided with the definite price at which they were offered.

Of the first block of securities, the New York banks took $35,000,000 while $15,000,000 were distributed between those of Boston and Philadelphia. By October, only about one-half of the first $50,000,000 was taken by the people at large; yet the payment for the second $50,000,000 of bonds was promptly advanced by the banks on October 1. That is, investors did not regard the securities at the price fixed as an attractive investment; the banks, therefore, were unable to dispose of the bonds, while they had already credited the Treasury with the advances, on which payments in coin must be made on demand. The difficulty of disposing of the securities became increasingly great. The business conditions prevailing were extremely unfavorable and military events were discouraging. Only $42,000,000 of securities had been sold to the people by the end of October. Although the sales were slow, the banks were bold enough to take the third block of $50,000,000 on December 16.

The situation was a dangerous one for the banks. Having credited the Treasury with the value of the securities, they were obliged to pay coin whenever called upon by the needs of the government. If the bonds had been rapidly sold, they would have been recouped for their advances. Unhappily this was not the fact; and the banks found themselves losing specie, while their funds were locked up in unsalable bonds. The progress towards the climax was evident in the accounts of the New York banks, which disclosed imminent danger as early as October.[1]

Instead of improving, however, public credit declined. The general distrust was intensified by contemporary political events.

[1] The effects of the bond operations may be seen in the item of deposits, which

The danger of trouble with England in consequence of the capture of Mason and Slidell was announced on November 16, and the resolution of the United States not to surrender them, on the following day. This had a considerable effect on the banks by leading depositors to withdraw specie. Reserves began to decline still more rapidly early in December, and by the 28th, 25 per cent. of the specie of the banks had disappeared. The result was the cessation of specie payments by the New York banks on the 30th, and the same course was immediately followed by the other banks.

The results of this action on the part of the banks were momentous. Once the banks had ceased specie payments, there was no source from which the Treasury could obtain coin with which to redeem its demand Treasury notes. Suspension by the Treasury, therefore, at once ensued.

270. At the opening of 1862, then, the whole country was upon a basis of bank paper. This currency was issued by about sixteen hundred different institutions. It varied greatly in value and was not legally receivable by the government in payment of dues. For a long time there had been talk of the introduction of some national system of regulating the currency. It was necessary to have some recognized medium of exchange other than specie, which should be receivable by the government and which could be used in daily transactions by the people without the constant annoyance of consulting bank-note detectors. Mr. Chase had very early devoted attention to the subject of the currency and in an early report had, as

were swollen on August 31, October 12, and November 30, by the sums credited to the Treasury.

1861	Loans	Specie	Deposits
August 17	109	50	92
" 31	*141*	45	*120*
September 28	126	38	96
October 12	*156*	41	*129*
November 16	137	42	110
" 30	*163*	42	*136*
December 14	158	39	129
" 28	155	29	116

elsewhere seen[1] carefully balanced the comparative advantages and disadvantages of a currency issued by the government (the first step toward which had been taken in the issue of demand notes) as against one issued by banks. He had undoubtedly come to a conclusion strongly in favor of a uniform bank currency. The institution of a system of national banking was a favorite plan with Mr. Chase. He had already several times advocated it and had suggested it both in and outside of his official reports. He had desired that all banks should be required to purchase United States bonds and deposit them with the government as security for their circulation, more especially because it would furnish a market for government securities. This, combined with his desire for a uniform currency, had led him to favor the adoption of some plan for a national banking system. A plan for such a system was in fact in process of preparation just at the close of 1861, but required considerable time for elaboration. At the same time the government expenses were piling up at a rate much faster than had been anticipated. Just at this moment came the suspension of specie payments by the banks and the government. The outlook was that the government would be without means at the end of some thirty days. Mr. Spaulding of the Committee on Ways and Means, therefore, "changed the legal tender section intended originally to accompany the bank bill, into a separate bill . . . . and on his own motion introduced it into the House by unanimous consent on the 30th of December, 1861."[1] It was thought that $100,000,000 must be had during the succeeding three months or the government must stop payment. Mr. Spaulding believed that this could be obtained only by the issue of government obligations to serve as currency, and he thought that these must be given the legal-tender quality in order that banks and others might not discriminate against them. It was only with difficulty that Mr. Spaulding was able to induce his colleagues to report the legal-tender bill to the House. It,

[1] Pp. 395–397, for quotation of Mr. Chase's report at length.

[1] SPAULDING, *History of the Legal Tender Paper Money.* Buffalo, N. Y., 1869, p. 14.

however, was reported and was brought before the attention of the public during the early part of January 1862.

271. Attempts to justify the introduction of the first legal tender bill have most often been made on the ground of necessity. Just in what way the issue of the notes was a necessity is not made clear. It seems certain that the government could have sold any reasonable quantity of bonds had it been willing to let them go at the market prices. True, the act of July 17, 1861, had forbidden the sale of bonds at less than par. Bonds, however, were selling at 88 in New York when the legal tender act was proposed, and even the seven-thirty Treasury notes were below par. It was impossible to maintain the price of the securities by a mere legislative refusal to take less than par, and the only legitimate measure would have been the sale of bonds at prevailing prices and the relaxation of the terms of the act in such a way as to permit this course. Such a modification would have been quite as quickly obtainable as the passage of the first legal tender act. The act was thus in no sense a "necessity," inasmuch as the government might easily have adopted another course more immediately available and entirely free from the serious objections to the legal tender act itself. Immediately upon hearing of the new measure the more enlightened bankers of the country offered strenuous opposition, the banks of New York, Boston, and Philadelphia sending delegates to Washington to speak against the bill. On behalf of the banks Mr. James Gallatin, president of the Gallatin Bank of New York, submitted a plan for raising the revenue necessary to carry on the war. This plan included several distinct measures:

1. Taxation sufficient to bring in $125,000,000 of additional revenue over and above import duties.

2. Cessation of the issue of demand notes further than those already authorized.

3. The issue of $100,000,000 of two-year Treasury notes, of low denominations, receivable for government dues except customs.

4. Suspension of the subtreasury act and use of the banks as depositories.

5. Issue of 6 per cent. twenty-year bonds at market prices.

6. The granting of power to the Secretary to make temporary loans by hypothecating any portion of the funded stock already authorized by Congress.

272. This plan was unfavorably regarded by Mr. Chase and the House and Senate committees, but, after another conference between Mr. Chase and the delegates of the banks on January 15, the following plan was adopted:

1. The banks were to receive and pay out freely the demand notes already authorized.

2. No further demand notes were to be authorized, but Congress should allow the issue of 3.65 per cent. one year Treasury notes to be exchanged for the demand notes and to be convertible into seven-thirty three-year bonds.

3. The demand notes were not to be made a legal tender.

4. At least $20,000,000 in seven-thirty bonds were to be paid within the next two weeks to such public creditors as might desire.

5. The national bank act was to be passed.

The plan finally accepted by Mr. Chase thus omitted entirely the authority to sell bonds at their current price in the open market. According to Mr. Spaulding, "The press spoke out plainly against the Secretary being authorized to put United States bonds on the market without any limitation as to the price he might obtain for them." But it was precisely the failure to grant to the Secretary the power to borrow for the government upon the same terms as for any one else which completely crippled the plan finally approved, and made its inadequacy so plain as to lead to its rejection without hesitation by the committees of Congress. This unwillingness to sell bonds at their market price, and the readiness to issue legal-tender notes appears shortsighted in the light of the fact that, after the subsequent issue of the legal tenders the bonds, although sold nominally for par, actually brought far less than that amount in consequence of the serious depreciation of the paper.

There has been much controversy over the question whether or not Mr. Chase should have raised the means necessary

for carrying on the war by taxation instead of relying chiefly upon borrowing. This, however, is not the most important question. Granting that the war was to be carried on by means of loans it is clear that the government could obtain these loans only by the same methods as private individuals. By issuing inconvertible paper which it received back in exchange for its bonds a much more serious loss was incurred than if the bonds had been sold for current prices at the outset, inasmuch as the depreciation of the paper rendered the larger number of "dollars" nominally received for bonds worth much less in terms of commodities than a smaller number of specie dollars would have been. Yet this loss to the government was not the most serious result of the issue of the legal-tender notes. The refusal to borrow by legitimate methods and the resort to a forced loan may be criticised upon several grounds but upon none so severely as upon the confusion between the fiscal and monetary functions of the government by which the standard of payment and prices was made to change with every slight variation in the credit of the government. Had the standard of the country continued to be gold no shock to the national credit could have materially altered the prices of commodities, or caused doubt regarding the medium in which contracts would be fulfilled. But the issue of a government legal-tender promise to pay at a time when, and primarily because, the Treasury was without the means with which to pay, altered the standard of the country, and made all business transactions and all current prices vary with changes in the credit of the government and in accord with the purely fiscal situation of the Treasury.

273. The plan as above modified was evidently too weak to be of much assistance, and the Committee on Ways and Means therefore preferred the legal-tender bill. In accordance with the wishes of Mr. Chase the bill was, therefore, brought before Congress. In its final form it provided for the issue of $150,000,000 of United States notes which were to be "a legal tender in payment of all debts public and private."

A few words may be said concerning the debate on the bill. The debates covered a wide range, although some of the

points principally discussed might seem of least importance. Probably the point most contested was the constitutionality of the bill. It was at first thought that Secretary Chase did not believe in its constitutionality, and in order to obtain his opinion on that point a resolution had already been offered referring the bill to the Secretary for suggestions. He had replied by a statement of the great needs of the Treasury and an expression of his unwillingness to make the notes a legal tender, although he thought that the legal-tender quality would protect the majority of the people against persons and institutions who might, as in the case of the demand Treasury notes, refuse to receive them. The question of constitutionality was thus neglected by Secretary Chase, although he wrote that "necessity seemed to demand the bill." The debate, however, continued, but on this point at least it was inconclusive. Some members of Congress speaking in favor of the constitutionality, derived the power to issue legal-tender notes from the right to borrow money, others from the right to coin money and regulate the value thereof, but all of these arguments found opponents. The argument which was considered strongest by the adherents of the bill was not a quibble over the constitutionality (for it was recognized that the Constitution would bear a liberal construction at such a time, if ever), but the absolute necessity of the measure.

It has already been seen that Mr. Chase had declared that the government would soon be out of means, and this argument, together with the impossibility of selling bonds, except at a discount, was constantly reiterated. It was said that the notes would enable the government to obtain money without begging for it. It could not only exchange them for commodities, but could pay the soldiers and sailors with them, a purpose for which money was immediately and especially needed. The need of a uniform currency which should be payable to the government was also worth consideration, for the demand notes in circulation were not very considerable in amount, bank paper was not receivable, and specie was difficult to obtain. It was said that the notes would assist in floating new loans, by affording the people a currency wherewith to pay for bonds. And, lastly, it was urged that the

legal-tender quality was needed in order to insure the prompt reception of the notes by those who had claims against the government, and by banks and others who, it was feared, would refuse to receive them. Probably the strongest arguments against the bill, were those which predicted the almost certain resort to further issues, and the shock to government credit which would result from the issue of irredeemable paper currency. Most of those who finally voted for the bill saw no other immediate means either of floating loans at what seemed reasonable prices, or of making the notes pass current without the legal tender quality. Even under these circumstances, however, the vote on the measure as finally passed and approved by President Lincoln on February 25, 1862 was a partisan one. The real reason why the legal-tender act was not defeated was the lack of leadership. As already seen, the measure was not the only resort open to the government, but the lack of any consistent policy either on the part of the Treasury, or of its opponents, and the failure to adopt necessary means by legitimate methods finally forced the passage of the bill.

274. The act of February 25, 1862, was comparatively simple in its terms. It provided that the Secretary of the Treasury might issue " on the credit of the United States one hundred and fifty millions of dollars ($150,000,000) of United States notes not bearing interest, payable at par, at the Treasury of the United States, and of such denominations as he may deem expedient, not less than five dollars each." An equal amount of these notes were to take the place of the demand Treasury notes which were authorized by the acts of July 17, 1861, and February 12, 1862. The retirement of these demand notes being authorized, the $150,000,000 of notes (whose issue was thus provided for) were declared to be receivable by the United States in return for all dues to it, except duties on imports, and payable by the United States for all obligations except interest on the public debt, and they were to be a legal tender between individuals in payment of debts of every kind. The notes were, furthermore, to be received in liquidation of all loans which might in the future be floated by the government, and, by an important sec-

tion of the act, the Secretary of the Treasury was authorized to fund the legal-tender notes as well as the Treasury notes provided for in former acts, into United States 6 per cent. bonds at par. The notes were thus distinctly regarded in the act as a mere temporary floating debt which had no character of permanence, but was ultimately to be converted into permanent form by being refunded into bonds of the United States.

275. The operation of the legal-tender act was different from what had been anticipated. The notes did not, as expected, return to the Treasury to be funded into 6 per cent. bonds, for this was too low a rate of interest to be attractive. A depreciation of from 5 to 8 per cent. in the value of the notes soon became apparent. The government, moreover, made no effort to borrow. By the 29th of May the issue was nearly exhausted, $146,000,000 of legal tenders being then in circulation. It was in fact less than six weeks after the passage of the first bill that government necessities forced Mr. Chase to demand, in a letter written June 7, authority for the issue of another $150,000,000. The notes authorized by the first issue had been rapidly paid out to satisfy public creditors, but the average daily expenditures of the government now amounted to $1,000,000 and revenues were only $380,000. He, therefore, suggested the issue of $150,000,000 of legal tender notes in addition to those already outstanding.

Mr. Chase's request for more notes alarmed those who had opposed the former bill. Senator Chandler, of Michigan, introduced a resolution "that the amount of Treasury notes already authorized by law shall never be increased." The bill, however, was brought forward by the Committee on Ways and Means in the House. It was said that the policy of the issue had been amply justified. Some agreed to the passage of the bill because of the uselessness of opposition. Some who had voted for the first bill as a temporary measure of necessity opposed the second on the ground that the inconvertible-paper policy was now being adopted as permanent. There were many who wanted to drive bank-notes out of circulation, and make way for the issue of more government paper on the ground that the profit

arising from such a currency ought to accrue to the government, if to anyone. There were very many who denied the existence of a necessity. Recent Union victories and the passage of a tax bill had strengthened the credit of the government and it was thought that loans could now easily be floated. The measure was finally passed, and it became a law on the 11th of July. It was similar in its terms to the first act and authorized the issue of $150,000,000 of legal-tender notes. It provided, however, that not to exceed $35,000,000 might be of denominations lower than five dollars, and that none should be for fractional parts of a dollar,[1] but continued the provision for refunding the notes into 6 per cent. bonds.

276. No further attempts to secure the issue of legal-tender notes were made by Secretary Chase during the remainder of the year 1862. His report to Congress in December of that year made an unfavorable showing. He estimated that there would be a deficit for the current fiscal year amounting to $276,-900,000, while for the succeeding year, the deficit was estimated at $622,300,000, making an aggregate of $900,000,000. He suggested two possible means of raising this sum. The first was a further issue of United States notes. But though he maintained that the notes had more than satisfied his expectations, and, although he believed that the currency was not seriously depreciated, that whatever depreciation did exist was due "not to the increase of United States notes, but to the increase of bank circulation and deposits," he did not believe that a further inflation of the currency was advisable. He urged that the addition of $277,000,000 (the amount to be raised for fiscal needs) to the existing circulation would convert the legal-tender currency "into a positive calamity" and he, therefore, urged a strict reliance upon loans, and, as a means of rendering these possible, he once more presented his scheme for a national banking system. A most important part of his suggestions was the recommendation that the clauses forbidding the sale of

[1] This provision was soon rendered of no use by the depreciation of the legal tender notes so far that subsidiary coin was driven out of circulation. This led to the passage (July 17) of an act authorizing the use of postage stamps as currency.

bonds below market value and permitting the holder of United States notes to exchange them for bonds at par, be repealed. The latter clause, he said, prevented the bonds from rising above the value of the notes, while the former prevented sales of bonds to those who wished to sell them again at a profit. The result of Mr. Chase's recommendations was the formulation by the Committee on Ways and Means of a bill authorizing a loan of $900,000,000, of which $300,000,000 might be issued in legal-tender notes. Of the few members who spoke energetically against the bill, several finally voted for the scheme because they were unable to suggest better means of raising revenue. The debate as a whole was desultory and indecisive, and compared very unfavorably with the debate upon the first, or even that upon the second legal-tender act. It was contended by many that there had been no inflation of the currency, that greenbacks had not fallen in value, but gold had risen. It was shown that, during the suspension, wages and prices had not varied exactly in accordance with the violent fluctuations of the premium on gold, and it was argued from this that there was, therefore, no relation between them. Those who pointed to the danger of shaking the credit of the government by further issues of notes, and the probability that loans could not be floated, since there was danger that they would be paid in depreciated paper, were answered by references to the flag and the eagle.

The bill, however, finally passed the House on January 26, 1863, not even a yea and nay vote being taken. In the Finance Committee of the Senate, the new issue of legal-tender notes was cut down from $300,000,000 to $150,000,000. This action, contrary to what might have been expected, aroused little or no objection and met with little discussion either in or out of the Senate. The bill became a law on March 3, 1863, and, as thus finally approved, authorized the issue of $400,000,000 of 6 per cent. three-year Treasury notes with interest payable in lawful money, and the issue of $150,000,000 additional of legal-tender notes.

277. No further issues of legal-tender notes were recommended by Secretary Chase. Although he declared in his

report of 1863 that the legal-tender currency had been highly satisfactory, he admitted that it was "clearly inexpedient to increase the amount" in circulation. He, therefore, suggested that revenue be raised by other means, and the general opinion of Congress seemed in accord with his own. "To force the Treasury to issue legal-tender notes in any way beyond the present limits," said Mr. Morrill, of Vermont, "would result in disappointment and disaster." This conviction appeared in the "bill to provide ways and means for the support of the government," which was approved on June 30, 1864, and was expressed in the provision: "Nor shall the total amount of United States notes issued, or to be issued, ever exceed $400,000,000 and such additional sum, not exceeding $50,000,000, as may be temporarily required for the redemption of temporary loan." A distinct pledge to the country that no further issues of greenbacks should take place was thus given, but attracted little attention in spite of an unsuccessful attempt by Mr. Stevens to secure the adoption of a clause providing for the payment of interest on new loans in currency. The pledge thus given was ultimately kept. In spite of many propositions to enlarge the volume of the United States notes no further issues have ever been authorized.

278. The evil effects of the legal-tender notes could, however, already be observed. The fluctuations in the value of the currency had been productive of great disorder in business and had produced a very strong speculative tendency. The fact that they had become the legal standard, instead of gold, resulted at once in the settlement of all prices in terms of paper.[1]

Gold had thus been driven from circulation and had become the subject of a special sort of speculation. This was principally carried on in New York by what was known as the "Gold Board," the operations of which were, no doubt, analogous to those of gambling. There were many who supposed that the speculation in gold had brought about or had intensified the depreciation of the legal tender paper, and Congress was moved by this feeling to attempt in some way to regulate it. During March 1864, it passed a resolution authorizing the Secretary of the Treasury to sell any surplus gold on hand. Import duties being payable in gold and imports having increased, a considerable sum had accumulated, and by the terms of the Independent Treasury Act was, of course, withdrawn from the markets. It was thought that this withdrawal of gold tended to embarrass the regular

The outcome was a serious financial embarrassment to the government, and, as will later be seen (Section 310), a heavy increase in the cost of the war. The unfavorable financial and military situation, too, reacted upon the credit of the government and increased the tendency to depreciation. The eighteen months succeeding the passage of the third legal-tender act were a period of deep discouragement. Although the value of the currency fluctuated for a time, it entered, about the end of September 1863, upon a course of steady depreciation. During the whole of the year 1863 there were no events of public importance tending to improve the government credit. Nor did the course of things become more favorable during the early months of 1864. Public credit grew worse. The effort to float an issue of $200,000,000 of 5–40 6 per cent. bonds was an almost total failure. Mr. Chase was thoroughly discouraged by prevailing conditions, and on the first of July his resignation was announced. The value of the notes continued to decline, and on the 11th of July touched its lowest point — $35.09 in gold for $100 in currency — and, although a reaction soon set in, the public credit

merchant in getting the gold necessary to pay his import duties, so that the government became a factor in the New York gold market. Despite considerable opposition, the resolution was passed, and in its final form authorized the Secretary to anticipate the payment of interest by a period not exceeding a year, or to sell any gold not necessary for the payment of interest. The mere introduction of this measure, said a member from New York City, unsettled the gold market and Senator Sherman declared that gold went up in consequence 6 or 7 per cent. The bill, however, contrary to expections, did not diminish the premium on gold, which rose considerably, and the price of $100 of gold in paper rose from $159 to $169.75 during the month in which the bill was passed. This lack of success led to the introduction of a bill which originated with Secretary Chase and which after considerable controversy was passed, June 17, 1864. By the terms of this act, it was made "unlawful to make any contract for the purchase or sale and delivery of any gold coin or bullion to be delivered on any day subsequent to the day of making such contract, or for the payment of any sum, either fixed or contingent, in default of the delivery of any gold coin or bullion or to make any contract for the purchase or sale and delivery of any bullion exchange to be delivered at any time beyond ten days subsequent to the making of such contract." It was further made unlawful for any banker or broker to make any purchases or sales of gold coin or bullion or of foreign exchange or any contract therefor, except at his regular place of business.

The result of the passage of this bill was increased fluctuation and depreciation of the notes. Within five days gold rose from less than 200 to 230, and a bill to repeal the gold act was promptly introduced and passed with practically no opposition.

continued for some time to be discouragingly low. During the year subsequent to July 1864, the situation grew more favorable. The notes rose in value, in consequence of military successes and the brighter prospects for the government, with no decrease in the volume of the circulation. The close of the war found the price of the notes much higher ($77.82 in gold for $100 in currency on May 11, 1865), and everything seemed to point to an early resumption of specie payments. It had, in fact, been the constant supposition during the war that suspension was merely temporary, and that specie payments would be resumed immediately upon the restoration of peace. No one had thought of a protracted suspension. Mr. McCulloch, therefore, in his annual report, of 1865, urged the retirement of the legal-tender currency and the adoption of measures looking to ultimate resumption of specie payments. The war was now over, and inasmuch as the legal-tender acts had been regarded as purely temporary and war measures, the Secretary proposed to carry these views into effect. There was no dissent from his plans on the part of Congress. The House of Representatives on December 18, 1865, immediately upon receipt of the Secretary's recommendations, passed the following resolution by a vote of 144 yeas to six nays:

> That this House cordially concurs in the views of the Secretary in relation to the necessity of a contraction of the currency, with a view to as early a resumption of specie payment as the business of the country will permit; and we hereby pledge coöperative action to this end as speedily as possible.

279. Notwithstanding the apparently cordial attitude toward an early resumption of specie payments thus manifested by Congress, it soon became apparent that there would be strenuous opposition to any supposed contraction of the circulation. There were many who maintained that contraction was not the way in which to resume specie payments, while there were others, although they were not as yet very numerous, who opposed resumption itself. Some advocated the accumulation of a reserve in gold, without any attempt to reduce the volume of notes outstanding. This divergence of opinion was brought out in the debate over the bill authorizing the Secretary of the

Treasury to receive Treasury notes or other obligations, whether interest-bearing or not, in exchange for bonds. He was also to be allowed to sell bonds in the United States or elsewhere to any amount, in exchange for lawful money, Treasury notes, or certificates of indebtedness. This, of course, implied a contraction of the currency to any amount that the Secretary of the Treasury might see fit. The arguments for and against contraction, and for and against resumption, were brought up and debated—principally those concerning contraction. The outcome was a surprise to those who had relied upon the disposition of Congress to support the Secretary in the work of resumption, and indicated that some pressure had been brought to bear to turn the attitude of Congress into one of opposition to resumption. The bill was finally amended by a compromise clause, which provided "that of the United States notes not more than $10,000,000 may be retired and canceled within six months from the passage of this act, and thereafter not more than $4,000,000 in any one month." The act was passed April 12, 1866, and seriously crippled the power of the Secretary to continue his policy of resumption.

280. From the time of the passage of the act just discussed, several events coincided to stimulate the fear of contraction. During 1866 the interest-bearing notes ceased to circulate. They were more and more absorbed by the national banks as reserve, inasmuch as they were more profitable to hold than non-interest-bearing notes. Moreover, the disappearance of the circulation of state banks under the influence of the act taxing these issues had been rapid. There had been, however, no real contraction. Although Mr. McCulloch reduced the volume of the legal tenders and fractional currency outstanding by $66,000,000, this decrease was about compensated by an increase of $62,000,000 in national bank notes.[1] The real cause of suffering was

[1] During the fiscal year 1867 the Secretary continued his policy of retiring the United States notes. More compound-interest notes were funded in 5 per cent. bonds. National bank notes also increased, and the demand for some sort of interest-bearing currency in place of the compound-interest notes for use as bank reserves, led Congress to authorize the issue of $50,000,000 in certificates bearing 3 per cent. interest for the redemption of the compound-interest notes. These measures offset the reduction in

not an imaginary contraction, but the serious change which was taking place in the value of the standard itself. From the passage of the first legal tender act to the resumption of specie payments in 1879 the standard in the United States was the government's promise to pay. This promise, however, varied greatly in value with the variations of the government's credit. At the close of the war prices were expressed in terms of a currency which had suffered heavy depreciation. As conditions became more settled and the credit of the government rose, the value of its promise to pay rose correspondingly. This merely amounted to a continual change in the standard, and entailed the usual injurious consequences upon those who had made contracts at the time when paper was more heavily depreciated. All this, however, was little understood, and the suffering due to a change in the standard of value was attributed to an imaginary contraction.

281. The value of a dollar in greenbacks had been steadily rising, and, by the middle of 1867, had reached 71 cents in gold. The result of all this had been a decrease in prices, and, in consequence of the existing business depression, great pressure was brought to bear upon Congress to prohibit the further retirement of the legal tenders; and yet nothing could have prevented the fall of prices, so long as the paper was rising in value for natural reasons, except a destruction of government credit. But this was not then understood. The report of the Secretary showed his fear that the policy of reducing the issues of paper money was about to be discontinued. At one time he had hoped that specie payments would be resumed in 1868, but he now saw that this event was likely to be indefinitely postponed. Nevertheless, he argued strongly in favor of continuing the retirement of the notes. The change in the attitude of Congress with regard to the greenbacks, however, was plainly manifested in a

the currency by the retirement of United States notes during the year, but the redemption of the interest-bearing notes, combined with that of the legal tenders, made a total decrease of $65,000,000. On July 25, 1868, Congress authorized an additional issue of $25,000,000 of the 3 per cent. certificates, in order to offset the retirement of the compound-interest notes, of which only $28,000,000 remained outstanding on June 30, 1868.

legislative enactment, which became a law without the approval of the President upon February 4, 1868. The terms of the act, although brief, were explicit. They provided merely that the authority of the Secretary of the Treasury "to make any reduction of the currency by retiring or canceling United States notes shall be, and the same is, hereby suspended." This act had been reported to the House immediately upon the assembling of Congress on the 5th of December, 1867. Some had tried to put off the time for suspending contraction until May 1, 1868, but they had been overcome. The amount of the legal-tender notes, therefore, remained fixed at the point which had been reached when the act was passed. At that time, the volume of these notes in circulation was $356,000,000. It was true that the Secretary had not for some time retired any of the legal tenders, and had announced that he should not continue the policy of retirement so long as business continued in a troubled condition; nevertheless Congress was determined to put an end to the danger anticipated from leaving the power in the hands of the Secretary. The suspension of the power to continue the retirement of the notes did not, however, yield the expected relief, for the causes which were producing a change in the standard proportionate to the improvement in the credit of the government were, of course, unaffected by such action.

282. Moreover, a new question closely connected with the whole problem of resumption just now presented itself. It was necessary to decide upon the sort of currency in which the bonds were to be paid, and many desired that these loans should be paid in the notes for which they were issued. Some went so far as to argue that whereas the interest was to be duly paid for twenty years it made no difference whether or not bondholders received the principal itself, the payment of the interest being quite sufficient return for the loans. This question of the kind of money to be used in the payment of the bonds became the main issue of the exciting campaign of 1868 which resulted in the choice of President Grant. His election meant that the bonds would be paid in coin, and was an important victory for those who opposed paper-money infla-

tion. The campaign of 1868 was the first great struggle over the maintenance of the standard. Thus supported by the general body of voters, the Secretary in his report submitted to Congress in December 1868, again urged a continuance of the policy of retirement and an immediate provision for resumption. He even asked that the United States notes should, after the first day of January 1870, cease to be a legal tender in payment of debts subsequently contracted, and that they should cease to be a legal tender in any payments whatever, except for government dues, after January 1, 1871. He insisted that the interest and principal of the debt should continue to be met in coin. Congress did not go the length suggested by the Secretary of the Treasury. The result of the election forced it, however, to pass on the 18th of March 1869, "An Act to Strengthen the Public Credit," in which it was said in distinct terms that the faith of the United States was solemnly pledged to the payment in coin, or its equivalent, of all non-interest-bearing obligations of the United States known as United States notes and of all the interest bearing obligations, except where it had been otherwise expressly provided. "And the United States," continued the act, "also solemnly pledges its faith to make provision at the earliest practicable period for the redemption of the United States notes in coin." The effect of this act was to strengthen faith in the honesty of the intentions of the government, and during the year there was an increase of three cents in the gold value of the paper dollar. The refunding of the bonds, however, under the act of July 14, 1870, finally disposed of the whole question concerning the kind of payment for the bonds. Under that act the old bonds were paid in coin or were refunded into new coin-bonds.

283. While the change in the character of the standard was thus serious, and destructive to existing property relations, it was, after all, not the most important danger of the situation. Had the issue of the greenbacks resulted only in a temporary change of the standard to be overcome by common consent so soon as possible, the bad results, although serious, would not have been permanent. Inasmuch, however, as those who would

lose by a return to a lower price level, opposed any change looking to the retirement of the greenbacks from circulation, there developed a wholly changed point of view on the part of the community in general. It will be worth while to enquire briefly just what this change was.

It has already been seen that at the end of the Civil War Congress and the nation at large had been in accord with the government in desiring a return to specie payments and a diminution of the volume of the greenbacks, as was seen in the resolution of December 18, 1865, by which the House of Representatives concurred with the Secretary of the Treasury on the question of resumption and withdrawal of the paper money. The result of the pressure brought to bear upon Congress by those who feared steps of this sort, which had its effect in the act of July 12, 1866, has also been discussed. There had thus been already wrought a distinct change for the worse in the attitude of Congress. The fears of contraction already spoken of were exaggerated by the continued rise in value of the United States notes. It was true that all this time the decrease in the volume of the currency was being offset by the issue of national bank notes, but at this time the greenbacks were inelastic in volume and therefore likely to be subject to speculative operations, while they could not expand and contract automatically in response to currency needs. Countries which are upon a metallic basis, that is to say, upon the same basis as other countries of the world, can, when they need currency, draw upon the rest of the world for it, if they have property which they can give in exchange. But this was not the case with the United States. No matter how much actual property it might have had, or how much gold it might have obtained, its currency needs could not be met by this means. The greenback dollar being much below par and being a legal tender, it would have involved great loss to have used gold in payment. Thus, when currency was wanted, there could no more of it be had than was actually in circulation within the country at the time, and, in case of a stringency, there was but one means of supply — a resort to the govern-

ment. This tended to stimulate the habit of looking to the government for assistance in time of commercial pressure.

284. The evils of such a situation became very manifest not long after the Civil War. The operations of speculators in their efforts to produce artificial stringency in order to heighten or depress the price of the greenback, or of stocks, were very dangerous, for they involved embarrassment to the banks and consequent danger to the commercial community. It being necessary for banks to have unusually large supplies of currency in the autumn in order to supply the wants of country correspondents for moving the crops, speculators were able to count upon this periodic demand, and, by locking up currency and raising the rate of interest, they could often involve the customers of banks in serious difficulties. This intensified the hardships of the community, and, as has been seen, led to the act of February 4, 1868, suspending the authority to retire the notes, which was the direct outcome of the stringency that had been produced in the autumn of 1867. It was just about this time, too, that the first demands for increase in the currency, in order to relieve stringency, had been gratified. The difficulties under which the business public was laboring, owing to the use of a medium of exchange limited in volume and inelastic, were shown, also, in the act of February 19, 1869, which forbade the loaning of money on United States notes as security. This was a practice which had arisen from the speculative operations already spoken of, and which had resulted in the locking up of large volumes of currency at the times when they were most needed.

But there were many other consequences, such as the New York gold conspiracy, intended to affect the current quotations of the price of the greenback, which no one even thought of attacking by law, but which had the same tendency to deprive the public of the full use of its circulating medium. The demand for more currency, however, was partially satisfied just at this time by the act of July 12, 1870, which provided for the additional issue of $54,000,000 of national bank notes. This at first gave a fancied ease to the market, and, being followed by a brief period of unusual prosperity, partially quieted

those who had been opposed to any further steps against the greenbacks. But this was only temporary. For some time the regular autumnal stringencies had been growing progressively more severe. In 1871 and 1872, the autumn demands found the banks of New York in an unusually weak condition. The habit of hoarding the greenbacks in times when tightness of the money market threatened, had become more extended as people learned that this was necessary to their protection because the currency was absolutely inelastic. There had, moreover, been much overtrading. A great development of railways and extensive investments of capital in forms not immediately productive was also preparing the way for financial difficulty. All of these tendencies culminated in the crisis of 1873. This need not be extensively studied at this point. A brief outline of the facts will suffice.

285. As already mentioned, the autumnal stringencies of 1871 and 1872 had been more than usually intense, and had found the banks less well provided than usual. They had already begun to see that they must contract their operations, and the autumn of 1873 found them in better condition than for some time previous to meet unusual demands. But these precautions were largely ineffectual. Suddenly, in September 1873, heavy failures gave the signal for the now well-known crisis, which exceeded in severity anything previously known in this country. It was just at this point that the evil effects of the precedent established by the government in relieving temporary stringency began to show itself. There were on hand in the vaults of the Treasury $44,000,000 in greenbacks. As will be remembered, the retirement of these had been authorized by law, and they were, therefore, no longer in circulation. When the intense stringency in the autumn of 1873 made itself felt, there was not only an established precedent for government interference in time of panic, but the means of interference were at hand. In response to heavy pressure brought to bear upon him, the Secretary, therefore, hesitated but little in issuing $26,000,000 of the $44,000,000 reserve of greenbacks, in exchange for bonds.

286. This method of affording relief had its effect upon the public mind. It stimulated the already existing tendency to look to government for aid in moments of difficulty, and to rush forward without thinking of the future, trusting that when difficulty should actually arise the government could be induced to furnish assistance. No better proof of the corrupting influence of this method, however, can be had than the attitude taken by Congress upon its reassembling in December, 1873. It was argued everywhere that if banks could be relieved as they had been by the assistance of the government in the preceding autumn, individuals might also be assisted in moments of embarrassment, and money should always be made plentiful by the government. The logical outcome of this attitude of public opinion was seen in the so-called inflation bill already briefly referred to in section 118. It was while the country was just beginning to recover from the effects of the crisis of 1873 that Congress assembled in December of that year. Inflation schemes of all sorts were numerous. On March 23, 1874, the House voted upon the proposition to fix the legal-tender notes at $356,000,000. The proposition suffered a severe defeat. The same fate met a second proposition, fixing the amount at $382,000,000, or the volume already outstanding. A proposition to fix the amount at $400,000,000 was carried. This action was the result of the strong tendency against contraction prevailing all over the country, and which was reflected in Congress. The result of the panic of 1873, the depression of business, the fall in values, were all attributed to the decrease in the volume of legal-tender currency, and naturally led to a movement to obtain the issue of more notes. The bill was brought up in the Senate by Mr. Wright, of Iowa, and was referred to the Finance Committee, where a compromise amendment fixing the amount of legal-tender notes at $382,000,000 was reported. An immense number of bills, and suggestions for bills, were sent in from all parts of the country. Propositions for nearly every form of inflation were submitted to Congress. Some favored a direct increase in the amount of the notes. Others desired to enlarge the note-issues of the national banks, others to issue an interest-bearing

currency which should be interchangeable with government bonds. The result of the whole discussion was the passage of a bill increasing the amount of legal-tender notes to $400,000,000, and authorizing an additional issue of $46,000,000 of bank notes to be distributed to banks in the South and West. The bill was sent to President Grant and was vetoed as an inflation measure. The friends of resumption had opposed the bill on the ground of inflation, but the inflationists had been strong in both House and Senate. Directly after the President had vetoed the first bill, the House passed a bill providing for free banking and sent it to the Senate Here it was amended in such a way as to be unrecognizable. Free banking was dropped. Fifty-five millions of currency were to be withdrawn from eastern banks and redistributed in the South and West, and, as a compromise, the amount of greenbacks in circulation was limited to what were then outstanding—$382,000,000. In this form, a compromise bill was passed, and received the approval of the President June 20, 1874.

287. The so-called inflation bill, which had been vetoed by President Grant, had been originally introduced by Senator Sherman as a resumption measure. It had provided for the resumption of specie payments in gold on January 1, 1876, but had been amended into a very different piece of legislation. President Grant's veto and the subsequent action of Congress in fixing the amount of the legal tender notes at $382,000,000 had had a wholesome effect upon the attitude of the Republican party. They were pledged to some action in favor of resumption, and it was felt that something definite must now be done. There was no hope of further inflation of the currency in the face of President Grant's opposition. Thus the attitude of those who desired to provide for resumption was strengthened. During the panic of 1873, the United States notes being the sole legal-tender currency, inasmuch as gold had been driven out and could not circulate in consequence of the depreciation of the notes, had been hoarded. Many now saw that in order to prevent a similar stringency, it was necessary to return to some basis where gold, which was obtainable from outside

sources, could be introduced as a legal-tender currency for use in everyday transactions.

It seemed necessary to settle upon some measure which would unite all of the supporters of resumption. A congressional caucus of republicans was therefore held, and a bill was finally drafted shortly after the assembling of Congress in December, 1874. This bill became the "Resumption Act."

288. The act of January 14, 1875, was by far the most important event in the history of the United States notes since their issue. It was entitled "An Act to Provide for the Resumption of Specie Payments," and beside making provision for restoring subsidiary coin to the circulation of the country, it ordered that "on and after the first day of January, 1879, the Secretary of the Treasury shall redeem in coin the United States legal-tender notes then outstanding on their presentation for redemption, at the office of the Assistant Treasurer of the United States in the city of New York, in sums not less than fifty dollars." In order to obtain the means for attaining the redemption thus provided for, the Secretary was authorized to make use of any "surplus revenues . . . . not otherwise appropriated," and to sell "at not less than par in coin, either of the description of bonds of the United States described in the act of Congress approved July 14, 1870." By further provision in the law, it was ordained that "it shall be the duty of the Secretary of the Treasury to redeem the legal-tender United States notes in excess only of $300,000,000 to the amount of 80 per cent." of such new bank notes as might be issued to national banks, "and to continue such redemption as such circulating notes are issued until there shall be outstanding the sum of $300,000,000 of such legal-tender United States notes and no more." This, of course, meant that as fast as new national bank notes were issued, legal-tender notes would be withdrawn at the rate of $80 to every $100 of new bank notes issued until the legal tenders should be reduced to $300,000,000.

The operation of this act did not justify the expectations of those who anticipated a considerable expansion of national

bank circulation. As has elsewhere been shown,[1] the provision for the retirement of $80 of United States notes for every $100 of national bank currency issued operated in a way quite the reverse of what had been expected. On account of the rise in the price of bonds, the national bank circulation contracted in volume by the retirement of old national bank notes more than it was increased by the issue of new ones. Nevertheless, the terms of the law forced the retirement of legal tenders as new bank notes were issued. At the same time, there was an unexpected decrease in national bank circulation, which, taken together with the withdrawals of United States notes as new national bank notes were issued, pursuant to the terms of the act, caused a net reduction of $67,000,000 in the paper circulation.[2] The act thus did not have the result generally expected. This was due to the absence of any provision for the re-issue of United States notes in case of a withdrawal of national bank notes. Expecting only an increase of bank notes, the opposite movement was neglected. The total contraction naturally irritated those who had hoped for a large increase in the currency.

289. As has been seen at an earlier point,[3] the campaign of 1868, resulting in the election of President Grant, was the first great contest between the inflationists and their opponents, and, from that time on, the struggle had been a continuous one. A distinct party of inflation, however, first prominently appeared as such in the presidential campaign of 1876. At that time, two principal lines of divergence from the older parties might be traced in the adoption of platforms by the Prohibition-Reform, and Greenback parties. Both of these parties agreed in their general attack upon the banks and their support of the use of government paper. The prohibition party declared in its platform for "the suppression by law of speculation and gambling in gold, stocks, products, and every form of money and property," and "the separation of the money of government from all banking institutions. The national government only," said this platform, "should exercise the high prerogative of issuing paper

[1] See Sec. 119, pp. 207–208.

[2] See Sec. 119.

[3] See *ante* pp. 419–420.

money." The platform of the greenback party differed from the one just cited only in being more extreme. It demanded "the immediate and unconditional repeal of the specie Resumption Act of January 14, 1875, and the rescue of our industries from ruin and disaster resulting from its enforcement." The party further declared that "a United States' note issued directly by the government and convertible on demand into United States obligations, bearing a rate of interest not exceeding one cent per day on each one hundred dollars, and exchangeable for United States notes at par, will afford the best circulating medium ever devised." They declared that "bank paper must be suppressed and the circulation restored to the United States to whom it belongs." Recognizing the fact that specie resumption would have to be provided for by the sale of gold bonds, the platform likewise protested "against any further issue of gold bonds for sale in foreign markets." In view of later events, it is also interesting to know that this platform opposed the purchase of silver for coinage into money as an operation "well calculated to enrich owners of silver mines," but likely to oppress an already overburdened people. On the other hand the republican party declared for the continuation of the movement toward specie payments, while the democratic party denounced the resumption clause and demanded its repeal, not avowedly because of an opposition to resumption, but because it professed to regard this clause as a hindrance to it. Although the greenback party did not register a very heavy vote at the election, it received quite sufficient to show that it had become an appreciable force in politics.

290. The contraction of the bank currency of the country had been going on steadily, although slowly. The Secretaries had contrived to reduce the outstanding volume of United States notes considerably, as has been seen. The opposition to the policy of reducing the volume of the United States notes, taking the form of an organized inflation party, and the depression in business prevailing since 1873, evidently led to a change of attitude on the part of Congress. At a special sesssion of Congress in October, 1877, the discontent aroused by the

attempt to place the currency on a stable basis burst forth. Many bills for the repeal of the Resumption Act were introduced, thirteen making their appearance in a single day, and one of the bills passed the House on the 23d of December. As a concession to the inflationists, Congress reversed its attitude, and, by the act of May 31, 1878, provided that from the date of the passage of the act it should be unlawful for the Secretary of the Treasury or any other government officer to cancel or retire further amounts of the United States notes. Notes received into the Treasury were ordered to be re-issued and "kept in circulation."

291. In the meantime, however, steps toward resumption had been taken. At the close of 1873, there were some $46,000,000 of fractional currency in circulation. The value of the greenback dollar had risen to about 93 cents in gold. Inasmuch as fractional silver coins bore a seigniorage of about 7 per cent. they were now about equal in value to legal-tender notes. Mr. Richardson had, therefore, issued an order to the subtreasury officers in a letter of October 1873, by which he directed them to pay out silver coin to public creditors in sums not exceeding $5. This attempt at resumption of specie payments for fractional currency was futile, for the government had scarcely $450,000 in silver at the time. The order was quietly revoked soon after. The very first section of the Resumption Act, however, provided for the redemption of fractional currency in silver, and these provisions were supplemented by the act of April 17, 1876. Under these acts, the use of silver in place of the fractional currency soon began. At the close of the year 1876 it was reported by Mr. Morrill, then Secretary of the Treasury, that $22,000,000 in subsidiary silver coin had been issued, and $13,000,000 in fractional currency redeemed. During 1877 a large amount of fractional notes were displaced by silver. Secretary Sherman, too, was a determined advocate of the continuance of the resumption policy. His immediate predecessors had taken no decisive steps toward providing the means with which to redeem the greenbacks on the date specified. Secretary Sherman, however, proceeding upon the authority granted

by the act of January 14, 1875, to sell either of the descriptions of bonds described in the act of July 14, 1870, namely, five, four and one-half, or four, per cent. bonds, at not less than par in coin, decided to float enough to place him in position to resume specie payments. During 1877, he placed at par $15,-000,000 of four and one-half per cent. bonds, and $25,000,000 of four per cents., thus obtaining a reserve of $40,000,000 of gold before October 1877; and in April of the following year $50,000,000 of four and one-half per cents., at a premium of one and one-half. In this way, should circumstances prove favorable, a large part of the gold for resumption was obtained. In addition to these steps, arrangements were made with the several assay-offices to exchange legal-tender notes for gold, and the government became a member of the Clearing-House Association of New York. The Clearing-House agreed to receive all balances due it upon checks and drafts in legal-tender notes, in consideration of the receipt and collection by government of its checks through the Clearing-House. As a last step in the arrangements for resumption, Secretary Sherman announced to Congress his intention of receiving United States notes in payment for customs dues, although these were legally payable only in coin. The Treasurer and all other officers of the Treasury Department were ordered to recognize no distinction between coin and legal tenders after January 1.

As early as 1870, the price of the paper dollar had permanently taken an upward trend. This may be seen in Chart XI, elsewhere given,[1] in which the value of the greenback dollar in gold has been represented. The paper currency continued to rise in value quite steadily, notwithstanding temporary fluctuations, from 1870 to 1879. The quotation of gold in fact fell, in 1876, as low as 107 and, by the end of 1877, to 102½, but this was because of gold accumulations. A year later (December 17) the greenbacks reached par in gold and, on the following day, the New York Gold Room was closed. New York banks ceased to carry special gold accounts with their customers. In short there could no longer be any question of the success of

[1] See p. 468.

the resumption measures. Although the active resumption policy of Secretary Sherman did much toward bringing the desired result to pass, it would probably have been ineffectual had not current events united to assist his policy in a singularly fortunate way. The most important fact in the situation was the unusual size of the crops during the years immediately preceding 1879, and the strong European demand for them which resulted in a net excess of exports over imports of merchandise amounting to $257,814,234 in 1878. This great excess was the culmination of a movement extending over several years of similar favorable conditions. With the balance of trade thus heavily in favor of the United States large imports of specie were a natural outcome of the situation and rendered it possible to accumulate a reserve without great sacrifice. "Every step in these preparations for resumption" said Secretary Sherman, December 2, 1878, "has been accompanied with increased business and confidence. The accumulation of coin, instead of increasing its price as was feared by many, has steadily reduced its premium in the market. The depressing and ruinous losses that followed the panic of 1873 had not diminished in 1875 when the Resumption Act passed, but every measure taken in the execution or enforcement of this act has tended to lighten these losses and to reduce the premium on coin so that it is now merely nominal. The present condition of our trade, industry, and commerce . . . . our ample reserves, and the general confidence inspired in our financial condition seem to justify the opinion that we are prepared to commence and maintain resumption from and after the first day of January A. D. 1879."[1]

292. On the 1st of January, 1879, there were on hand in the Treasuary $135,400,000 in gold coin and bullion, $167,000,000 in standard silver dollars, and $15,500,000 in fractional silver coin, including silver bullion. The net amount of gold thus available for redemption of the legal tender notes was about 40 per cent. of the notes outstanding. Inasmuch as more than one half of the remainder of the notes were held by

[1] *Finance Report*, 1878, p. x.

the national banks, it was impossible, should these institutions coöperate with the Treasury, that resumption should be a failure. As a matter of fact, the greatest confidence in the ability of the government to redeem the notes was felt. Scarcely any notes were presented, and in the whole course of the year 1879 only $11,500,000; while during the same period holders of coin obligations of the government willingly accepted more than $250,000,000 of notes in payment.

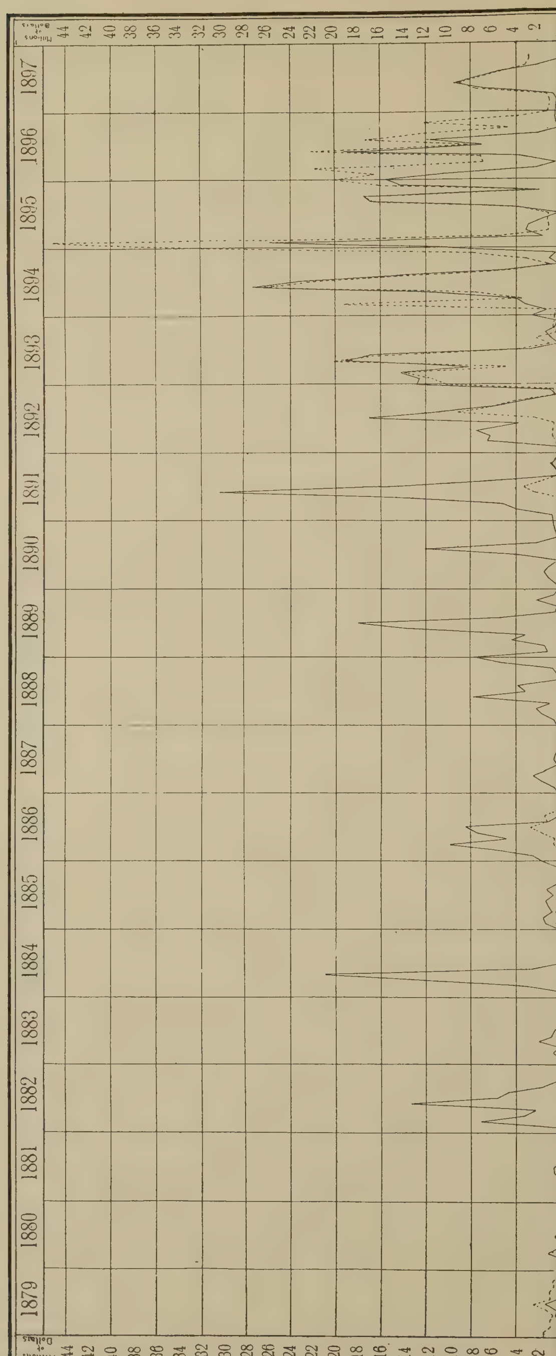
Resumption was thus a happily accomplished fact, but the resumption system contained in itself the elements of danger, to say nothing of whatever perils might result from outside influences. The danger lay in the fact that the resumption was not conducted upon banking principles, although it was a banking operation. As already seen, the act of January 14, 1875, had merely specified the way in which means for resumption might be obtained. It had not formally constituted these means a reserve, although it had been distinctly recognized, in the debates in Congress and in the estimates of government officers, that such a reserve, amounting to about $100,000,000, must exist. Nevertheless the reserve was not separated from the other funds of the Treasury and consecrated to the redemption of the greenbacks and to that alone. It was left to fluctuate as the incomes and expenditures of the government fluctuated, and to run the danger of being depleted whenever revenues might happen to be insufficient. This important point had not been overlooked by Secretary Sherman. In his annual report for 1879, he had requested that a fund be formally set apart for the redemption of greenbacks, but Congress had taken no action. It was not until the passage of the act of July 12, 1882, which amended the original national bank act and provided for the extension of the charters of the national banks, that the gold reserve was recognized in connection with regulations for the issue of gold certificates. The issue of such certificates was ordered to be suspended "whenever the amount of gold coin and bullion in the Treasury reserved for the redemption of United States notes, falls below one hundred millions ($100,000,000) of dollars."

293. It has been seen that the resumption of specie payments, which took effect January 1, 1879, did not result in the presentation of large volumes of United States notes for redemption in gold. Compared with the amount outstanding, the quantity of those presented for redemption was in fact insignificant. Nor did the volume of redemptions materially increase for a number of years. A consideration of the statistics for the redemptions of United States notes in gold shows that, for the most part, the calls on the Treasury for gold in exchange for United States notes were inconsiderable until after 1890. Since that date, an entire change has taken place, and the redemptions although subject to severe fluctuation, have become large and seem to recur periodically. This change may be seen in the accompanying Chart X, upon which the redemptions of the notes have been plotted.

In order to understand the reasons for the change in the course of the redemptions subsequent to 1890, it is necessary to say something of another portion of the monetary history of the United States. The passage of the Bland-Allison act of February 28, 1878, forced the Treasury to purchase and coin not less than $2,000,000 nor more than $4,000,000 worth of silver bullion per month, and to issue certificates for all silver deposited with the Treasury. Thus, just before resumption was finally brought about, a new element was introduced into the monetary system. As already seen, the faith of the United States had been repeatedly pledged to redeem the obligations of the government in "coin." Inasmuch as the only coin in existence, at the time these pledges had been made, was gold, it was tacitly understood that the word "coin" meant gold. But with the monthly introduction of a large volume of silver into the market, there arose a doubt in some minds as to whether the word coin might not be interpreted to mean silver. There was, of course, great distrust of silver. The certificates were of large denominations and were returned direct to the United States in payment for customs. Silver rapidly returned to the Treasury, and thus the danger of its encumbering the circulation was not prominently brought forward. In order to get the silver into circulation, the issue of

CHART X

UNITED STATES NOTES AND TREASURY NOTES REDEEMED IN GOLD, AND EXPORTS OF GOLD.



———— Exports of gold.

.................United States notes and Treasury notes redeemed in gold.

certificates of low denomination was resorted to and silver dollars were distributed, as early as 1880, by the offer of drafts, payable in silver certificates, on sub-treasuries in the West and South in exchange for deposits of gold at New York. Gold was abundant, for crops were good, and it had been largely imported. Even the panic of 1884 did not seriously shake faith in the ability of the Treasury to maintain gold payments, inasmuch as revenues were large and balances adequate. True, gold was less received for customs, but there could be no doubt of redemption, and gold could easily enough be had from other sources. It was just at this time, however, that the first serious symptoms of difficulty became apparent. The net gold on hand in the Treasury decreased, and the Treasury began to find the circulation saturated with silver and hence unable to absorb more. It was necessary to do two things if silver purchases were to go on: (1) increase gold holdings, and (2) find a new field for silver. The first of these plans was put into operation by the cessation of debt payment. The second was brought into effect by the issue of certificates of low denomination and the withdrawal of legal tenders of low denomination. Thus the silver policy had two direct results, it weakened faith in the ability and will of the government to pay in gold by arresting its progress in the payment of debt, and it at the same time turned the legal tenders into notes of large denomination, thus taking them out of the hands of the people and placing them in the hands of banks and other institutions whence they could easily be gathered for the purpose of draining the Treasury of gold.

Although danger was, for the time, postponed by the prosperous business conditions and by the large gold receipts of the government after 1886, the causes of trouble were still working obscurely and made themselves felt in 1890. On July 14 of that year the passage of the so-called Sherman act was secured. This act intensified existing difficulties by enlarging the compulsory purchase of silver to 4,500,000 ounces per month, and by ordering the issue of so-called Treasury notes which were made legal tender and which the government was practically obliged

to redeem in gold. Worst of all, faith in the will and ability of the government to maintain gold redemption was thus shaken through the consequent decrease in its gold revenues. While the volume of legal-tender notes was steadily increased by the action of the act of 1890, and the lower strata of the circulation had been made to consist not as formerly of greenbacks, but of silver certificates, so that the larger greenbacks were constantly available for presentation, the ability of the government to get gold or revenue of any sort was likely at any moment to be cut off, should a period of panic, caused by distrust, shake business confidence.

This was precisely what occurred ; and, as will presently be seen, it resulted in a struggle to maintain gold payments and the gold standard, such as the United States had never known before. Had it not been for the repeal of the act of 1890 in the fall of 1893, such maintenance would have been impossible. But though repealed, it and its predecessor had been in operation long enough to produce a condition which now makes the legal-tender notes — both greenbacks and Treasury notes — a constant and direct menace to the maintenance of gold payments in times of panic or deficient revenue.

294. The act of 1890 had scarcely been passed when gold exports began to increase and, as has been shown in Chart X, these gold exports coincided very nearly with redemptions of the United States notes presented to the Treasury.

It is stated that the losses of gold by the United States were due to a desire on the part of several leading European nations to supply themselves with large stocks of gold resulting in a "scramble" to obtain an adequate supply of the metal in the markets of the world. It is said that for some years a number of nations had been seeking to replace their irredeemable paper or silver with gold, and to that end had set on foot unusual and unnatural movements of specie from one market to another. During the first half of the decade 1880–1890, Italy had supplied herself with gold. Shortly after 1890, Austria entered upon the work of consummating her long-projected resumption of specie payments and consequently

entered the market as a purchaser of gold. She was still in the market for gold at the middle of 1894, but did not long continue as a purchaser, her demand being shortly afterward satisfied. During the same years, Russia was a heavy importer of gold, it being desired to accumulate a stock for the resumption of specie payments which has lately been effected. At about the same time several of the minor countries of the world attempted to introduce the gold standard, and thus added their demand to that of the larger countries already mentioned. It is upon the basis of these facts that the claim is made that the United States was forced to furnish gold, not on account of any action on the part of this country or its citizens, but in response to an outside demand. It is asserted that the gold supply was insufficient, and that, therefore, a gain in gold by any of the larger nations implied that an equivalent amount had been taken from a supposedly necessary stock in other countries.

295. Plausible as these statements may be it does not appear that in the case in question they were correct. The gold demands of Austria, Russia, and Italy affected only indirectly, if they affected at all, the United States. They did not draw directly from the United States, but primarily from other European countries and these were supplied partly, perhaps, from the United States, but much more largely from other sources of gold supply and especially from the large annual production of new gold. Whatever portion of the gold was shipped from the United States, did not leave because of an artificial demand. There were three chief causes for these unusual withdrawals of gold: (1) Demands arising out of trade conditions; (2) demands due to withdrawals of foreign investments; (3) interest payments on foreign capital.

The demands for gold which arose from the general condition of trade were the result of a long series of events. Business in the United States prior to 1890–1893 had been exceedingly active, profits had been high, over-confidence and speculative enterprise were common. The result of all these had been a tendency to extravagant expenditure and had resulted in

large importations of goods. At the same time, our ability to pay had been considerably diminished. A considerable portion of the annual indebtedness of the United States is liquidated by the shipment of agricultural products. The price of these products had been steadily declining in the markets of the world and, our income being decreased, our ability to pay had in this way been diminished. The result could only be a transfer of capital, either in the form of specie or of obligations to pay specie.

296. The second of the causes which have been mentioned, namely, the withdrawal of investments by foreigners, was the real difficulty in the whole situation. The fact that we had been spending more than we had earned and importing more than we could pay for would have been of no permanent importance to a wealthy country like the United States, had foreigners continued to be willing to loan us capital. The excess of expenditures over income would easily have corrected itself through the operation of the usual mechanism of trade and industry. Just at the time, however, when we most needed capital, a step had been taken which destroyed the confidence of foreign investors in our intention to settle with them honestly. We are normally indebted to foreigners to an extent which is estimated at from $100,000,000 to $350,000,000 annually. But during the latter part of 1892 and during 1893 and the earlier portion of 1894, it is estimated that about $300,000,000 of securities were returned to us by foreigners who had purchased them. That is to say, those who had invested in American stocks and bonds, or those who had loaned their capital for carrying on American enterprises, suddenly changed their attitude and became desirous to dispose of their investments. The securities were placed upon the American market and the remittance of the proceeds necessarily resulted in gold shipments. But the worst of the situation was not in a mere temporary sale of our securities, but in the fact that the willingness of foreign investors to loan had received a shock. As already remarked, our supplies of capital were thus reduced at the very moment when business and expenditures had been so enlarged as to demand an increase.

297. This brings us to the third point noted above. Foreigners being no longer willing to invest their capital in the United States, demanded remittances of money due them on interest account and refused to reinvest this with us. It thus became necessary for us to ship gold for all three of the reasons mentioned. All these, however, depended on one single fact, the fear of payment of debts by the United States in silver instead of in gold. It thus appears that the argument which states that gold exports arose from unusual demands of some principal countries for gold to be used in their monetary systems is unfounded. The fact in the case is that in nearly all the large banks and money centers of Europe gold had for some time past been rapidly accumulating. The demands of foreign countries desirous of resuming specie payments had fallen upon this increasing European stock, but even this had been scarcely weakened in any appreciable degree.

298. There was another side to the withdrawals of gold from the Treasury of the United States. The foreign demand has already been considered and it has been shown that this was largely due to distrust of our monetary policy. The same thing occurred at home. Those who had maturing debts which must be liquidated in gold, and those who had government promises to pay coin in their hands, fearing that the word coin might be interpreted to mean silver, brought government notes to the Treasury and obtained gold for the purpose of hoarding it to meet future obligations.

From all sides then, both domestic and foreign the Treasury was being drained of its gold, just as would have been the case with a bank whose solvency, or ability to liquidate immediately, was doubted. At the same time its supplies of gold were cut off. Normally this, or any other, government has but one way of obtaining money, that is, by taking it from the people through taxation. And of all our taxes the sort from which we obtain the largest quantities of gold is the customs. But, as we have seen, a decrease in importations was taking place both because of our too great expenditures in the past and of the curtailment of our supplies of purchasing power. The aggregate revenue of the Treasury, depending as it did

on our tariff duties, was thus suddenly reduced. This was not the worst. A marked change in the kind of money received in payment of import duties was noticeable. From the very moment of the passage of the Sherman Act, gold receipts at New York in payment of tariff dues, began to decrease, and silver and government obligations to pay gold—principally the former—took its place. The gold reserve of the Treasury was thus weakened in several different ways at the same moment. Its obligations were presented for payment; its aggregate of receipts was decreased; and the percentage of gold in these receipts largely fell off, while the percentage of the government's own obligations and of silver largely increased.

299. In the face of this situation the Treasury, if it wished to maintain redemption of the legal tenders in gold was obliged to resort to some extraordinary steps, its normal sources of revenue being unfruitful. The passage of the Sherman Act set in motion a steady decline in the gold reserve. The net gold of the Treasury had stood at $190,232,409 in June 1890, but, owing to the operation of the various forces already studied, it had slowly fallen to $121,266,633, at the opening of 1893. From this point, the decrease was rapid and alarming. The coming on of the intense stringency, during the summer of 1893, resulted in considerable withdrawals and, by January of the following year, the Treasury's gold stock had been reduced to $65,650,175. The gold reserve was thus far below the traditional $100,000,000 limit and danger was apprehended in almost all quarters. Like individuals, the government if it does not obtain sufficient money from its income for expenses must borrow it, for resort to fresh taxation and increased revenue therefrom were, of course, out of the question as an immediately effective expedient. As a consequence of this state of things, the government was obliged to resort to the sale of bonds—a course it had not pursued for many years. It was obliged to give notice, January 17, 1894, of its intention to make use of the power granted by the Resumption Act of January 14, 1875, and in accordance with the provisions of this act $50,000,000 of 5 per cent. 10-year bonds dated February 1, 1894, were sold at a

premium and $58,700,000 were thereby netted to the government. The drain of gold continued, and then a temporary respite was obtained during the crop movement which enabled the government to exchange some notes for gold. The situation became rapidly worse in November 1894. Little more than $61,000,000 constituted the gold reserve of the Treasury, according to the official returns for October, and during several preceding months it had fallen considerably below even this figure. This necessitated the sale, in accordance with a public notice of November 13, 1894, of another $50,000,000 of 5 per cent. bonds, dated February 1, 1894, which netted about $58,500,000. It might have been expected that the sale of $100,000,000 of bonds would have been sufficient to supply the Treasury with gold to meet its demand obligations. And, had it not continued to reissue those obligations, this might have been the case. But the necessity of re-issuing the greenbacks under the act of 1878 left the public always with as many of them in its hands as ever, and, inasmuch as the increasing violence of the silver agitation stimulated the fear that the silver basis would be the inevitable outcome, and that silver, not gold, would be the metal of redemption, holders of United States notes became more than ever eager to force these notes into the hands of the Treasury for redemption in gold before this gold should finally be exhausted or silver should be substituted for it. Every effort, therefore, of the government to maintain redemption rendered its situation more desperate, so long as its credit continued to be impaired by the silver agitation. The returns for February 8, 1895, showed but $41,340,181 of gold on hand. Exports continued unfavorable. Exchange ruled persistently against the United States. Commercial distress was prevalent, and every effort of the government to extricate itself from the difficulties made matters worse. It was unlikely that another bond sale would meet with success. At all events it would have to be placed at an exceedingly unfavorable figure.

300. Under these circumstances, it was necessary to resort to unusual measures, since the Treasury found itself face to face with the danger that the United States notes would become irredeem-

able in anything other than silver coin. On February 8, 1895, the President entered into a contract whereby the Treasury was to be furnished with 3,500,000 ounces of gold. Payment was to be made with $62,315,400 of government bonds, thus making the price $104.49. The mere agreement to furnish gold, however, was not the most important part of the contract. The purchasers of the bonds undertook to regulate the foreign exchanges of this country in such a way that no exports of gold, and consequently no serious drain of gold from the Treasury, should occur during the time that their operations were in progress. This course was absolutely necessary, since, unless exports could be checked, it was hardly likely that any reasonable amount of gold furnished to the Treasury would suffice to keep it out of difficulties as long as it was constantly compelled to re-issue the greenbacks. This hazardous undertaking the purchasers of the bonds succeeded in carrying out. In the face of a high rate of exchange, heavy gold exports were prevented, since, whenever these became probable, the market was quieted by supplying bills of exchange to meet all ordinary demands. This process, however, came to an end during the latter part of June 1895, at which time the reserve stood at $107,500,000. It seemed then that the danger might be nearly over. It was likely that the movement of crops would then assist in furnishing considerable gold, and this, in fact, took place; nevertheless the continued uneasiness and unrest in commercial circles which was aggravated by the knowledge that the trouble was due not to any commercial difficulty, but purely to uneasiness as to the adoption of silver as a standard, led to some slight exports of gold in July and August, while some further exports took place from purely natural causes. These losses were partially met by further deposits of gold with the Treasury which, together with gold revenues from ordinary sources, left the reserve at $93,000,000 toward the end of September.

301. The danger to the gold reserve was, however, not yet past. During the last five months of 1895 the total withdrawals of gold from the Treasury were more than $67,600,000, and by January 6, 1896, the reserve had fallen to $61,251,710,

and by February 1, to $49,800,000. This was considered a dangerous situation under the existing conditions, and it was decided to issue a popular loan. A circular asking for subscriptions for $100,000,000 of 4 per cent. bonds of the same character as those sold during the preceding year was, therefore, sent out, and the bonds were disposed of without difficulty at an average price of $111.166. These new accessions of gold sufficed to place the reserve in a strong position. With the reëstablishment of business confidence and of faith in the intention of the government to maintain gold redemption, foreign trade became more favorable, gold exports decreased and finally ceased. During the two years just past the reserve, though, of course, fluctuating somewhat, has remained well able to meet all demands upon it.

The whole of this history of the gold reserve in recent years is merely an illustration of the way in which the present system of government notes throws upon the Treasury the necessity of furnishing gold for export. In Chart X, already given, the gold exports have been represented, and it appears that they correspond quite closely with the redemptions of the United States notes and Treasury notes.

302. At the present time, our national bank notes are redeemable only in greenbacks. Our silver dollars, and as a consequence, our silver certificates, must be kept at par with gold. They must, therefore, be received by the government in payments to it. The convertibility of the whole thus depends upon the power of the government to maintain the convertibility of the legal tender notes. It appears from this showing, then, that the only method of obtaining gold open to the public at the present time is, either to buy it in open market or to demand the redemption of certain forms of government money at the Treasury in gold. It has been seen that the silver dollars and silver certificates are indirectly redeemable in gold by the Treasury. And since in times of stringency gold is in special demand, it will always be most easily obtained from the Treasury by the presentation of some form of currency for redemption. All forms of demand for gold, then, must fall directly upon the Treasury

reserve. It cannot, like a bank, regulate its issues in accordance with its condition, for it is obliged by law to keep these issues to the amount of $346,000,000 constantly outstanding. And it cannot, as we have already seen, realize the property necessary to secure instant convertibility. It is thus subject to the increased demands sure to fall upon any institution whose immediate solvency is doubted, the more so, as it is the only institution which is compelled to furnish gold.

303. It goes without saying that demands for gold may arise from several different causes, but many of these result in the same thing — an export of gold. Either importers find it necessary to ship the gold in payment for purchases, or foreign holders of American securities have for some reason decided to sell these and withdraw gold, or some other force is operating to produce the same effect. Whenever exports of gold are low, that is to say, whenever the greatest cause of demand for gold is inactive, redemptions of United States notes are insignificant in amount, and *vice versa*. During the months when the Treasury was in greatest danger of finding itself unable to maintain redemption, exports of gold were heaviest, and were in every case immediately preceded by heavy redemptions of the notes. The outcome of this has already been discussed and is well known. A heavy bond sale for the purpose of replenishing the Treasury gold reserve was absolutely necessary; but the bearing of this necessity, which must always recur in times of stringency, remains to be noted. It is this: the government is obliged to borrow at the time when its credit is the lowest, and it can only realize the poorest prices for its securities. This was notably the case in both the last bond sales, for in both the average price realized was considerably below what it would have been, had the sale taken place under favorable conditions. This amounts merely to saying that the government's lack of immediate property forces it, in times of distress, to borrow at high rates of interest when it need normally borrow only at low ones. And this necessity and the loss ensuing from it are due solely to the obligation of redeeming the legal tenders.

EFFECT OF PAPER ISSUES ON THE COST OF THE CIVIL WAR.[1]

304. THE depreciation of the monetary unit of the country which served as the standard of value is the significant fact in the history of the greenback currency. From the depreciation followed many consequences of momentous importance to the community. At present, however, we are concerned with but one of these results, the effect of the depreciation upon the cost of the war to the taxpayers of the country. If the depreciation made any difference in that cost, this difference must appear in the amount of the public debt which the nation owed at the close of the struggle. For, if the use of a depreciated paper currency made the expenses of waging war less, it decreased the amount of money which the government had to borrow, and therefore left the country with a debt smaller than would otherwise have been the case. On the other hand, if the currency increased the cost of the war, it added to the sums which had to be borrowed, and therefore created a larger debt. Thus the financial advantage, or disadvantage, of the use of the greenbacks is to be seen in the amount of the debt incurred. The problem may be stated more exactly in this form : By how much was the sum which the nation owed at the close of the war greater or less than the sum which it probably would have owed had no legal-tender paper currency been issued, that is, had the specie standard of value been maintained ?

305. An analysis will provide a method by which this problem may be attacked. Had the war been conducted on a specie basis, the debt contracted would have been equivalent to the total excess of the current expenditures expressed in terms of a specie dollar over the ordinary receipts of the Treasury likewise expressed in terms of a specie dollar. Now, the use of a paper dollar

[1] Taken from material kindly furnished to the Commission by Mr. W. C. Mitchell. See *Journal of Political Economy* (Chicago), March, 1897.

which had a value considerably less than that of a gold dollar artificially increased the nominal amount of all sums expressed in terms of it, in the same way that the use of a foot shorter than twelve inches would nominally increase the length of every article measured by it. Therefore the amount both of expenditures and of income was increased by the issue of paper money over what these sums would have been on a specie basis. The public debt actually contracted was equal to the excess of the annual expenditures, increased as they were by the depreciation, over the annual receipts similarly increased. Comparing this equation with the former one, it appears that the effect of the depreciation upon the amount of the debt is measured by the increase of expenditures minus the increase of revenues. There will, therefore, be three steps necessary to discover the increase or decrease of debt due to the issue of the greenbacks. (1) An estimate of the increase of expenditures caused by the depreciation must be made. (2) The like increase of revenue must be found. (3) The difference between these two sums will give the desired result. If, after this calculation has been made, the increase of revenues be found to exceed the increase of expenses, the conclusion will be that the debt incurred on account of the war was less by reason of the use of the paper currency, and the legal-tender acts must be considered a success from the financial point of view. If, however, the increase of expenditures be greater than the increase of receipts, the reverse conclusion must be drawn.

306. When prices rose in consequence of the depreciation of the currency, the government, like any other purchaser, was compelled to pay more paper money for the supplies which it bought. The following table gives some examples of this increase in necessary expenditures. It shows the progressive rise in the prices which the navy department was compelled to pay to obtain food and clothing for its sailors.

In considering the increase of expenditure, the first question to be settled, is by what method we can most accurately ascertain the addition made by the depreciation to the prices which the government had to pay. Two methods suggest themselves. It may be assumed that the increase was in proportion (1) to

TABLE I.

PRICES PAID BY THE FEDERAL GOVERNMENT FOR FOOD AND CLOTHING FOR YEARS 1861 TO 1865.

Name of article	1861	1862		1863		1864		1865	
		Price	Per cent.	Price	Per cent.	Price	Per cent.	Price	Per cent.
Food.									
Beans . . . . per bushel	$1.49	$2.24	150	$3.15	211	$3.22	216	. . . . .	. . .
Beef, fresh . . . . per pound	.0647	.0540	83	.075	116	.1132	175	$0.139	215
Coffee . . . . per pound	.1295	.2490	192	.3148	243	.4425	342	. . . . .	. . .
Molasses . . . . per gallon	.34	.3450	101	.59	174	1.19	350	. . . . .	. . .
Sugar . . . . per 100 pounds	6.17	8.99	146	13.22	214	23.50	381	. . . . .	. . .
Tea . . . . per pound	.398	.5890	151	.8195	210	1.1875	305	. . . . .	. . .
Vegetables, fresh . . . . . . per pound	.0197	.0135	68	.015	76	.0123	62	.026	132
Clothing.									
Blue cloth trousers . . . . . . per pair	3.08	3.37	109	4.88	158	5.92	192	9.33	303
Blue flannel overshirts . . . . . . each	1.45	1.615	111	2.975	205	3.15	211	4.19	289
Canvas duck trousers . . . . per pair	.99	1.07	108	1.74	176	1.98	200	3.57	361
Canvas duck . . . . per yard	.28	.3370	120	.55	196	.59	211	. . . . .	. . .
Blue nankeen . . . . per yard	.05	.05	100	.28	560	.255	510	.394	788
Blankets . . . . each	1.77	2.37	134	3.60	203	4.15	234	5.88	332
Calfskin laced shoes . . . . . per pair	1.28	1.42	111	2.20	172	2.13	166	2.57	201
Kipskin shoes . . . . per pair	1.31	1.48	113	2.14	163	2.18	166	2.54	194
Woolen socks . . . . per pair	.27	.2975	110	.3725	138	.549	203	.617	229
Mattresses, two covers . . . . . . each	4.45	4.60	103	9.15	206	11.57	260	. . . . .	. . .
Blue felt pea jackets . . . . each	10.00	10.00	100	. . . .	. . .	. . . . . .	. . .	22.97	230
Average	. . . . .	. . . . .	117	. . . . .	201	. . . . . .	246	. . . . .	298

NOTE.—The above are the contract prices which the government paid for the articles enumerated. Taken from reports of the Naval Bureau of Provisions and Clothing. See *Reports of the Secretary of the Navy*, 1861, p. 501; 1862, p. 892; 1863, p. 1049; 1864, p. 1172; 1865, part II., p. 381.

the rise in the average price level, as shown by Falkner's tables in the Senate report, or (2) to the decline in the gold value of the paper.

To the first method there is a serious objection. The price level is the resultant of forces affecting the supply and demand both of commodities and of paper. Our concern, however, is with the rise of prices only so far as it was due to the depreciation of the paper. There is no certainty that the rise of the price level was due solely to this cause. Indeed, it is reasonably certain that such was not the case. The war necessarily increased the demand for some commodities and decreased the demand for others. At the same time it greatly interfered with the supply of many staple products. Their prices would doubtless have risen considerably even had the war been conducted without a suspension of specie payments. To use an average price level in which these and other articles similarly affected were included, would be to charge to the depreciation of the currency an increase of price due to causes entirely independent of the issue of paper money. The first method would, therefore, not represent accurately the increase which the greenbacks brought about in the cost of the war.[1]

307. It seems fair, then, to conclude that the depreciation of the paper money in relation to gold gives a better basis than does the rise of prices in currency for estimating what prices the government would have had to pay for commodities upon a specie basis. At any rate, the former basis is the more conservative. This fact is established by the following comparison between the rise of commodities and the rise of gold in terms of the paper currency.[2]

[1] It is worth noticing, however, that the rise of prices which the government paid, as shown in Table I, was more rapid than the rise of general wholesale prices as shown by Dr. Falkner's figures.

[2] The value of commodities in terms of paper is Dr. Falkner's a erage price of all articles (*Senate Report*, part i, p. 91). The value of gold in paper is the average premium for January of each year (from the Treasury table referred to above, p. 125). The January price of gold is taken because Falkner's prices of commodities are from quotations for the month of January, with a few exceptions (*Report*, part i, p. 29). In making out the table of gold prices from that of currency prices Falkner uses the January premium on gold instead of the average for the whole year (*Report*, part i, p. 99).

Years	Value of commodities in paper	Value of gold in paper	Years	Value of commodities in paper	Value of gold in paper
1860........	100.0	100	1863.......	148.6	145.1
1861........	100.6	100	1864.......	190.5	155.5
1862........	117.8	102.5	1865.......	216.8	216.2

According to this table, commodities during the war were higher than gold, the value of both being expressed in terms of the paper currency. Therefore, if it be assumed that the prices which the government paid for commodities were as high above what would have been paid on a specie basis as the level of market prices in currency during the war was above what the price level had been in 1860 and in 1861, the increase of government expenditures will appear greater than if the rise is assumed to have been in proportion to the fall in the gold value of the paper. In adopting the latter standard, then, we shall err, if at all, on the safe side.

308. On this basis is made the following estimate of the amount by which the expenditures of the government were increased by the depreciation of the greenbacks.

The first section of the table gives an itemized account of the current expenditures of the United States for the latter half of the fiscal year 1862, for 1863, 1864, 1865, and the first two months of 1866. These limits are determined by the facts that the depreciation of the currency began January 1862, and the public debt reached its maximum amount August 31, 1865.[1] The propriety of these limits for an estimate of the whole amount by which the public debt was increased by the depreciation is evident.

Of these items of expenditure some were increased by the depreciation of the currency, and some were not. In the latter class fall most of the expenses for labor. Thus the pay of the soldiers was fixed by statute, and therefore could not be changed except by a new statute. Until May 1, 1864, the pay of the rank and file of the army remained what it had been when it was

[1] *Report of the Secretary of the Treasury*, 1866, p. 6.

made in specie. On that date, however, the wages of private soldiers was increased from $13 to $16 per month. The table shows what the pay of the army would have been upon a specie basis, that is, the actual pay, making allowance for this increase after May 1, 1864.

TABLE II.

INCREASE IN THE EXPENDITURES OF THE FEDERAL GOVERNMENT CAUSED BY THE DEPRECIATION OF THE CURRENCY 1862 TO 1866.

	Fiscal year 1862 (6 mos.)	Fiscal year 1863	Fiscal year 1864	Fiscal year 1865	Fiscal year 1866 (2 mos.)
I. Current expenditures.	Million	Million	Million	Million	Million
For war	$197.2	$599.3	$690.8	$1,031.3	$118.5
For navy	21.3	63.2	85.7	122.6	7.2
For Indians	1.1	3.1	2.5	3.8	.5
For pensions	.5	1.1	5.0	10.5	2.6
For miscellaneous objects	10.7	23.3	27.5	44.8	6.8
For interest on public debt	6.6	24.7	53.7	77.4	22.2
	$237.4	$714.7	$865.2	$1,290.4	$157.8
II. Expenditures not increased by the depreciation.					
For pay of the army	48.4	188.2	227.1	308.7	107.6
For pay of the navy	4.8	13.9	25.2	28.8	1.6
For salaries of the civil list	2.9	6.4	8.1	10.8	2.0
For expenses of foreign intercourse	.6	1.2	1.3	1.3	.2
For Indians	1.1	3.1	2.5	3.8	.5
For pensions	.5	1.1	5.0	10.5	2.6
For interest on the public debt	6.6	24.7	53.7	77.4	22.2
	$64.9	$238.6	$322.9	$441.3	$136.7
III. Expenditures increased by depreciation (I minus II.)	172.5	476.1	542.3	849.1	21.1
IV. Average value of $100 of currency in gold	96.9	72.9	64.0	49.5	70.1
V. Gold value of the expenditures increased by depreciation	167.2	347.1	347.1	420.3	14.8
VI. Amount by which depreciation increased expenditures	5.3	129.0	195.2	428.8	6.3
Add the increase in the pay of the army	....	....	7.1	57.9	20.1
VII. Total sum by which expenditures were increased by the depreciation	....	....	....	....	849.7

Other items of expenditure unaffected by the depreciation were the pay of the navy, the salaries of the officials on the civil

list, pensions, and the expenses of foreign intercourse. The payments to the Indians consisted partly of money, partly of commodities. The cost of the latter was of course increased by the rise of prices. To make sure of being on the safe side, however, the Indian disbursements are here included among the expenditures not increased by the depreciation.

Another item in the same class was the expenditure for interest. If the war had been conducted on a specie basis, taxes and the interest on the public debt would both have been paid in coin. When it passed to the paper basis the government expressly provided that the paper money should not be a legal tender for the interest on its debt. To obtain coin for this single purpose, customs duties were required to be paid in gold. Under this arrangement the issue of paper money made no difference with the item of interest directly. The same number of dollars had to be raised under the paper régime, and in the same medium, as would have been required on a specie basis.[1]

Since our object is to ascertain the increase of public debt due to the depreciation of the currency, the expenditures made in payment of the principal of the debt itself are excluded from the table. When the government contracted new loans to pay old debts that had matured, the increase and decrease would offset each other, provided the government could borrow at par. Of the debts that matured and were discharged during the war, part were paid in gold and part in paper.[2] Paper the government could most of the time borrow at par or even a small premium. But for gold a large premium had to be paid. However, the customs receipts considerably exceeded each year the

[1] Indirectly, however, the use of paper money did affect the interest charge in two ways: (1) The issues of United States notes constituted a loan without interest, and thus saved the interest upon a certain amount of borrowed money; (2) on the other hand, the use of the paper money increased the sums the government had to borrow, and therefore increased the interest charge.

[2] For example, the loan of 1842 was paid in gold (see Chase's letter to Congress on the subject *Executive Document No. 27*, p. 2, XXXVII Congress, third session). So also were the demand notes and the 7.30's issued in 1861. On the other hand the temporary loan and the compound-interest notes were paid in paper currency (see the provisions of the acts of February 25, 1862, § 4, 12 *Statutes at Large*, p. 345; and March 3, 1863, § 2, 12 *Statutes*, p. 710; and of June 30, 1864, 13 *Statutes*, p, 318).

interest charge, and thus gave the government a certain amount of gold with which to meet other coin obligations. This made it necessary to purchase but little specie, so that the increase of debt on this account may be safely disregarded.

All of these items of expenditure unaffected by the depreciation of the currency are grouped together in Section II of the table. By subtracting their sum from the total expenditures, we obtain figures expressing how much the expenditures were increased by the use of the greenbacks. This is given in Section III of the table. To find what these expenditures would probably have amounted to on a specie basis, their gold value is obtained by multiplying the amount for each year by the average value of the greenbacks in gold (section V). The difference between these sums (section VI) and the sums actually paid out, shows the extent to which the expenditures of the government were annually increased by the depreciation of the currency (section VII). The sum of these five amounts gives the total increase of expenditures caused by the issue of the greenbacks. This sum is $849,700,000.

309. The first section of Table III shows the current receipts of the government during the period under consideration. As with expenditures, there is reason to consider that the receipts from some sources were increased by the depreciation of the currency, and those from other sources were unaffected. To begin with the latter, the revenue derived from the direct tax could have been neither larger nor smaller by reason of the change to a paper basis. This item of receipts was collected under authority of the act of August 6, 1861, which had imposed a direct tax of $20,000,000 and apportioned it among the states according to their respective populations.[1] This act was passed six months before the suspension of specie payments; the amount to be raised by the tax was fixed by law, and the imposition was not repeated.[2]

Receipts from the sales of public lands were likewise unaffected by depreciation. The effect of the war was to discourage

[1] 12 *Statutes at Large*, 294–296.

[2] The act of July 1, 1862 § 119 (12 *Statutes at Large*, 489), provided that only

the buying of western lands from the government, and this caused a considerable falling off in the revenue of the Land Office. The decline in the value of the currency which might be paid for the lands did not suffice to check this tendency.

TABLE III.

INCREASE IN THE CURRENT RECEIPTS OF THE FEDERAL GOVERNMENT, DUE TO THE DEPRECIATION OF THE CURRENCY, 1862 TO 1866.

	Fiscal year 1862 (6 mos.)	Fiscal year 1863	Fiscal year 1864	Fiscal year 1865	Fiscal year 1866 (2 mos.)
I. Current receipts:[1]	Million	Million	Million	Million	Million
From customs	$33.5	$69.1	$102.3	$84.9	$31.3
From sales of public lands	.1	.2	.6	1.0	.1
From direct tax	1.8	1.5	.5	1.2	.0
From miscellaneous sources	.5	3.0	47.5	33.0	12.6
From internal revenue	....	37.6	109.7	209.5	64.4
	$35.9	$111.4	$260.6	$329.6	$108.4
II. Receipts increased by depreciation:					
From internal revenue	....	37.6	109.7	209.5	64.4
From miscellaneous sources, less premium on sales of gold	.5	3.0	28.2	27.7	11.7
	$0.5	$40.6	$137.9	$237.2	$76.1
III. Average value of $100 of currency in gold	96.9	72.9	64.0	49.5	70.1
IV. Gold value of the receipts increased by depreciation	.5	29.6	88.3	117.4	53.3
V. Increase of receipts through depreciation	.0	11.0	49.6	119.8	22.8
Add receipts from premium on sales of coin[2]	....	....	19.3	5.3	.9
	....	$11.0	$68.9	$125.1	$23.7
VI. Total increase of receipts by depreciation	$228.7	....	....	....	....

one direct tax should be levied until April 1, 1865. The Internal Revenue Act, approved June 30, 1864, § 173 (13 *Statutes at Large*, 304), declared that no direct tax should be levied until Congress passed a new law requiring it, which Congress did not do.

[1] As given by the annual statements of the Register of the Treasury (see *Finance Reports*, 1862, p. 37; 1863, pp. 34–35; 1864, p. 33; 1865, pp. 44–45; 1866, p. 31). For 1862 the receipts of the last two quarters of the year are given; for 1866 two-thirds of the receipts for the first quarter.

[2] For 1864 see *Executive Document No. 73*, p. 24, XXXVIII Congress, second session. $2,800,000 received as premium on gold sent to London from San Francisco

It has been already stated that customs duties were paid in gold during the war. The receipts from this source were therefore on the same footing as if specie payments had been maintained. All the duties were paid in coin, and the *ad valorem* duties assessed on the foreign specie valuation of the goods. The change in the value of the dollar in the United States made no difference directly in the customs receipts.

The revenue derived from miscellaneous sources comprises a considerable number of small items. Of these, some were doubtless increased by the depreciation, while others were unaffected. But one portion of these receipts, viz., the premium on sales of gold coin made in 1864, 1865, and 1866, should be set down as clear gain. The government imposed customs duties in gold; the coin received from this source exceeded the amount of its coin obligations, and this excess was sold in the gold market for paper money. In making up the estimate, the amount of this premium is subtracted from the miscellaneous receipts, and the remainder is counted as having been increased by the full amount of depreciation, although, as has been pointed out, it contains elements that certainly were not affected by the change in the value of the currency. The amount of the premiums is afterward added to the increase of revenue.

The last of the enumerated government receipts remains, the internal revenue duties. This system of taxation was inaugurated by an elaborate law passed July 1, 1862, which imposed certain duties, partly *ad valorem*, partly specific, upon a great variety of manufactured articles; imposed a tax upon the gross receipts of canals, railroads, theaters, etc.; taxed auction and brokers' sales; required licenses for practicing professions; levied an income and a legacy tax, and placed certain taxes upon articles of luxury, such as carriages, pianos and plate. This law was superseded two years later by another internal revenue act, which raised the rates of taxation and increased the number of

is included. For 1865 see *Executive Document No. 12*, p. 42, XXXIX Congress, second session. Being unable to find a statement of the premium on sales for the months of July and August 1865. We may assume that the premium was one-sixth of the amount for the preceding fiscal year.

articles made to pay duties. In considering the receipts from internal revenue for the fiscal year 1863–4, it is legitimate to consider the sums received from the *ad valorem* duties as having increased with the depreciation. But the specific duties should not be charged with a rate of increase greater than the depreciation in June 1862, when the act was passed. The act of July 1, 1864, however, readjusted all the duties to the basis of the depreciated currency; and perhaps it is fair to consider that all the receipts from internal revenue in the succeeding year were increased in proportion to the depreciation.

310. The estimate made in detail in Table III, after the same fashion as the calculation of the addition to the expenditures of the government caused by depreciation, gives the result that the receipts of the government were increased during the war 228.7 million dollars above what they would have been had the specie standard of values been maintained. Comparing this with the estimated increase of expenditures, we find that the outgo of the government was inflated by the influence of the depreciated currency $621,000,000 more than its income. This sum then represents, according to the plan of the calculation, the unnecessary addition which the use of a legal-tender paper currency made to the debt incurred during the war. Before taking the last step in the estimate, a question that naturally suggests itself may be answered. Suppose that the war had been conducted on a specie basis, how would the money raised by the greenbacks have been secured? Supposing the sum to have been borrowed, (1) the interest which the government would have paid would have been larger than was actually the case, for the greenbacks were "a loan without interest;" and (2) the sale of so many more bonds would have lowered the prices of government securities. Should not deduction be made from the estimated increase of the debt to offset these disadvantages of the specie basis?

To this it may be answered that guessing how the $450,000,000 secured by the use of the greenbacks might have been raised had the legal-tender acts not been passed is guessing at what can never be known. It is not necessary, however, to suppose

that the whole sum would have been borrowed on interest-bearing bonds. At least a part of the $450,000,000 might have been issued in demand notes convertible into gold. Then the interest charge would have been only upon the gold reserve kept to insure the instant redemption of the notes. In this case the saving of interest upon the use of notes, for which no coin reserve was kept, would have been much less than the increase of interest through the $621,000,000 extra loans, which the depreciation of these non-convertible notes made it necessary to borrow. And even on the supposition that the money had all been obtained by loans, the saving of interest by the issue of the greenbacks was only about $21,000,000 in excess of the interest paid on the unnecessary debt created by them.[1]

As to the lowering of the price of government securities that would have resulted from borrowing $450,000,000 more on bonds, it may be answered, first, that the suspension of specie payments, and the issue of legal-tender paper money — the ordinary resort of bankrupt governments — was in itself a great blow to the national credit, and therefore tended strongly to make the terms on which the Treasury could borrow less favorable; second, the depreciation in the price of government securities caused by selling $450,000,000 more of bonds would not have been so great as was that caused by borrowing the $621,000,000 extra, for which the greenback policy was responsible. A further sum should be charged against the greenbacks on this score. But since the amount of this item could be determined only by conjecture it will be neglected. However, in order to make ample allowance for the advantage of the "loan without interest," the saving of $21,000,000 will be deducted from the

[1] In the following table a comparison is made between the saving of interest on the greenbacks and the increase of interest due to the contraction of unnecessary debt. In making it, the assumption has been taken that there is a saving of interest for an average period of six months on the increase of greenbacks put in circulation during any year; and likewise that on the sums borrowed in any one year on account of the depreciation, interest was paid on the whole amount for an average of six months. Therefore in calculating the interest saved, or paid each year, the interest on the whole sum of greenbacks outstanding on the first day of the year, or of the total sum that had been borrowed because of depreciation up to that time, is taken for twelve months, and to this is added six months' interest on the increase of greenbacks or of

increase of debt. When this is done the greenbacks stand charged with an increase in the cost of the war up to August 31, 1865, amounting to $600,000,000.

311. It remains only to consider how the depreciation of the currency, which did not end with the war, affected the later payments of the public debt.

The depreciation of the currency made no difference in the amount of the wealth consumed during the war. The only way in which it did make a real increase in its cost came in the repayment of the debt. During the war the government bor-

debt during the year. With the greenbacks is included the amount of fractional currency in circulation, it forming a loan without interest to the government quite as much as the United States notes. The rate of interest taken is 6 per cent.

SAVING OF INTEREST BY THE USE OF PAPER MONEY.

	Fiscal years.				
Amount issued in................	1862	$ 96.6 m.	at 6%	(3 mo.) =	$ 1.45 m.
Outstanding commencement of....	1863	96.6	6	(12) =	5.80
Amount issued in................	1863	221.4	6	(6) =	6.64
Outstanding commencement of....	1864	318.0	6	(12) =	19.08
Amount issued in................	1864	136.1	6	(6) =	4.08
Outstanding commencement of....	1865	454.1	6	(12) =	27.25
Amount issued in................	1865	3.6	6	(6) =	.11
Outstanding commencement of....	1866	457.7	6	(2) =	4.58
Total..					$68.99 m.

INTEREST PAID ON DEBT INCURRED BECAUSE OF DEPRECIATION OF THE CURRENCY.

Borrowed during................	1862	$ 5.3 m.	at 6%	(3 mo.) =	$ .08 m.
by commencement of....	1863	5.3	6	(12) =	.32
during.................	1863	118.0	6	(6) =	3.54
by commencement of....	1864	123.3	6	(12) =	7.40
during.................	1864	133.4	6	(6) =	4.00
by commencement of....	1865	256.7	6	(12) =	15.40
during.................	1865	361.6	6	(6) =	10.85
by commencement of....	1866	618.3	6	(2) =	6.18
during first 2 months of..	1866	2.5	6	(1) =	.01
Total..					$47.78 m.

According to this estimate the saving of interest up to the moment when the debt reached its maximum was 21.21 million dollars. For the amount of paper currency outstanding at the close of each year see *Statistical Abstract of the United States*, 1878, p. 14. The statement of the debt incurred each year because of the depreciation of the currency is compiled from Tables II and III.

rowed vast amounts of capital from the community. Under the rise of prices this capital was expressed in, perhaps, twice as many dollars as it would have been on a specie basis. To borrow it, the government promised to pay back some time in the future this number of dollars, increased as it was by the effects of depreciation. The loss of the taxpayers depended on how much wealth the dollar represented when returned to the creditor in the future. As a matter of fact, the dollars paid in redemption of the debt were much more valuable than the dollars borrowed. In 1865 the Treasury borrowed, on giving its promise to pay, millions of "dollars" when their average value was less than fifty cents in gold. On maturity these loans were paid back in "dollars" worth 100 cents in gold. The difference between the gold value of 50 cents received and the 100 cents value repaid was not nominal; it was a real increase in the cost of the war to the taxpayers. It was so much more wealth which the people had to take from their pockets and give to the Treasury in order to pay the debt incurred by the government.

But not all of the debt was paid in dollars worth 100 cents in gold. A considerable portion was discharged in "lawful money," that is, in paper currency while it was still depreciated. In this case the loss to the people was the difference between the wealth represented by the dollar borrowed and the dollar returned, *i. e.*, rating gold as the standard of value, between the value of the paper dollar in specie when it was borrowed, and its value in specie at the time it was repaid.

If the war had been conducted on a coin basis, the number of "dollars" owed by the government at its close would have been—to take the figure of our calculation—some $600,000,000 less than it actually was. But on the specie basis, though the debt would have been less, every dollar of obligation would have been paid in coin. On the paper basis the government was free to pay part of its debt in depreciated paper. By so doing, a saving to the taxpayers was effected equal to the difference between a dollar in gold and a paper dollar at the time when this debt was in fact paid off. Evidently this saving is

an element that should be taken account of in estimating what the greenbacks cost the taxpayers.

During the war the government negotiated three kinds of loans: (1) loans of which the kind of money in which they should be repaid was not stipulated; (2) loans expressly payable in coin; (3) loans expressly payable in "lawful money." The terms on which the government could borrow were not the same for these different classes of securities. Obligations payable in lawful money never sold on such favorable terms as similar obligations payable in gold. There was always a discount against them in the shape either of a higher rate of interest or a lower price in the market. Thus the use of lawful money securities increased the amount of debt which was owing at the close of the war above what it would have been had all the obligations been made payable in coin.

The increase of debt from this cause should be included in the indictment against the greenbacks. How great this increase was, however, can only be conjectured. For this reason no estimate will be made of the amount by which the sale of lawful money securities increased the debt, although this sum should properly be deducted from the following calculation of the saving effected by using this kind of obligations. This omission tends to make the estimate of the saving too large.

After the war was over and the reduction of the debt had begun, the policy was adopted of paying all loans in coin, except when it had been expressly stipulated by the law authorizing them that they should be paid in lawful money. Of these lawful money obligations there were outstanding August 31, 1865, when the debt was at its maximum, some 1273.2 millions. Most of these bore a high rate of interest. and ran for but short terms. They were therefore the first part of the debt to be paid. Much the greater part of the whole amount had been retired by July 1, 1868. During these years the currency was at a discount of about 30 per cent. Above $1,000,000,000 of debt were paid in dollars depreciated to this extent.

This very rapid redemption of the lawful-money debt was accomplished by a process of refunding. While one obligation

was paid off, a new debt in part took its place. Thus the net reduction of the debt was a much slower process than one would think from looking merely at the rapid redemption of the currency obligations. In 1868 nearly $550,000,000 of these debts were paid; but new obligations were created to such an extent that at the end of the year the principal of the public debt was but 66.4 millions less than it had been at the beginning. The 547.7 millions of currency obligations were all paid and paid in paper money; but this paper was obtained only by issuing 483.3 millions of new obligations, and since these new debts were all payable in coin, it is only on the balance of 66.4 millions that the government made a saving by paying in depreciated currency.

Proceeding on the principle just explained that where the redemption of lawful-money obligations exceeded the net reduction of the debt, a saving was really made only on this latter sum, the conclusion of the estimate is that it required some 71.6 millions less of wealth to redeem the lawful-money obligations than would have been required had they been paid in specie.

One estimate has shown that the use of the greenback currency made a needless addition to the public debt of the country at the close of the war amounting to 600,000,000 of "dollars." The last estimate has led to the conclusion that by paying a certain portion of the debt in "dollars" made of paper, the government saved in wealth to the taxpayer 71.6 millions of gold dollars. The difference between this saving and the addition to the public debt gives the real amount of wealth measured in gold dollars which the paper money plan of finance cost the country. This amount is 528.4 millions.

The first legal-tender act confused a fiscal with a monetary purpose. Financial affairs had been allowed to drift into a crisis. To relieve the Treasury the government sought to utilize its prerogative of determining upon a standard of value and of coining money, for its own financial advantage. To attain this end, the interest which the community has in the maintenance of a standard free from sudden and violent fluctuations, was

openly sacrificed. That the people suffered is not surprising. But it seems equally true, unless these conclusions are wholly wrong, that the Treasury suffered likewise. Instead of profiting by the attempt to use the medium of exchange as a financial engine, the government, because of this attempt, incurred a vastly greater debt, which eventually had to be paid by the people.

EFFECT OF PAPER ISSUES UPON PRICES.

312. It must not be expected in studying the variations in prices consequent upon the issue of United States notes, that these fluctuations could follow closely the value of the paper money. A greatly enlarged government demand and an entirely new demand for certain kinds of commodities, with a decreased demand on the part of the nation, a large portion of which was engaged in carrying on war, and whose wants were consequently different from what they otherwise would have been, introduced serious changes in the value of commodities not assignable to the character of the currency. These, however, it is impossible to separate from those which result from depreciation, although it is not difficult to see very nearly where they lie. In the case of products coming from the Southern states, many prices naturally rose very considerably, since their supply was cut off on account of the hostile relations between the North and South. For example, the average level of prices in 1864 was about 190.5 per cent. of what it was in 1860. Some typical Southern products, however, were vastly higher than this. Tar was 720 per cent. of its price in 1860, and turpentine was 900. The same was true in a lesser degree of rice, molasses, and sugar. Cotton stood at 1,090.9 per cent. in 1865, as compared with its price in 1860.

Again, the increase in taxation both in the way of higher import duties and of higher, or entirely new, internal revenue taxes, naturally made the prices of the commodities upon which they were imposed higher than before. This, likewise, had no reference to depreciation in the currency. Some possible exceptions may appear in the case of imported commodities, the duties upon which must be paid in gold. Inasmuch as gold had to be bought in New York for greenbacks, the higher the premium upon greenbacks the higher the price in paper which the importer would have to charge when he sold his goods.

There were also important changes in the direction of

demand, due to the changed conditions brought about by the war. Thus articles used by the government for the support of the army, such as ship biscuit, codfish, mackerel and hams, rose largely in price on account of the increased government demand falling upon a supply no greater than before. There was less building during the war, and consequently building material declined, comparatively speaking, in price. In 1864, bricks sold for but 160 per cent. of the price in 1860, and other building materials stood at similar figures, although gold was quoted in greenbacks at 258.1.

313. But while some weight must be allowed to these various changes in prices which had no connection with the currency, there was an alteration in general prices, due to the depreciation of the notes, so great and general as to exert a most important influence upon the well-being of the community at large. All commodities rose enormously in price. There was thus a permanently injurious influence upon those who had fixed incomes. In the accompanying table the variations in the prices of commodities during the war period, have been represented:

COMPARISON OF THE DEPRECIATION OF THE CURRENCY WITH THE RISE OF PRICES OF COMMODITIES, 1862–1865.[1]

	Average value in gold of $100 in currency for month	Relative prices on first day of month	Average value in currency of $100 in gold for month
1862—January,	97.6	113	102.5
April,	98.5	112	101.5
July,	86.6	117	115.5
October,	77.8	131	128.5
1863—January,	68.9	145	145.1
April,	66.0	165	151.5
July,	76.6	161	130.6
October,	67.7	161	147.7
1864—January,	64.3	188	155.5
April,	57.9	199	172.7
July,	38.7	250	258.1
October,	48.3	252	207.2
1865—January,	46.3	261	216.2
April,	67.3	208	148.5
July,	70.4	193	142.1
October,	68.7	214	145.5

[1] See *Commerce, Finance, and Immigration of the United States*, No. 4, Series 1895–6; p. 518; and *Journal of Political Economy*, 1894–5, p. 158.

The second column of the table represents the variations in prices expressed in percentages of the prices of 1860, which are taken as 100 per cent. The prices are those of 114 articles, 35 representing food, 10 cloths and clothing, 7 fuel and lighting, 13 metals and implements, 15 lumber and building materials, 16 drugs and chemicals, 10 furniture, 8 miscellaneous. Thus on January 1, 1863, the combined prices of the 114 selected articles were 145 per cent. of what they were during 1860. The first column of the table represents the average value in gold of $100 in currency for the month, that is to say, it represents the number of gold dollars which people were willing to exchange for $100 in greenbacks. The third column represents the reverse of the first, in other words, the average value in currency of $100 in gold for the month. Thus, during January, 1863, it was necessary, on the average, to give $145.10 in greenbacks for $100 in gold.

It is thus possible to compare the prices of a great number of articles during the Civil War directly with the depreciation in the paper currency, that is to say, directly with the price of gold as expressed in greenbacks. If there had been no other disturbing influences we might reasonably expect that the change in the prices of commodities would follow pretty closely the rise in the price of gold. But owing to the changes in the demand for commodities, which have already been outlined, and owing to the fact that prices when they have once risen, tend to become fixed, we do not find, as a matter of fact, an exact correspondence. It has been seen, however, that the changes which have just been mentioned tended to raise the price of some articles and to depress that of some others, according to the stimulation, or the depression, of the demand for those articles. As has been seen, there were changes, too, in the conditions of production, which operated in general to limit supply, and thus again tended to raise prices. There were thus several contradictory forces at work. These partially offset one another, inasmuch, as, when we combine the prices of so many as 114 articles, the increase in the prices of some tends to be offset by the decrease in the prices of others. In general, however, the tendency of

goods to rise faster than the paper money fell in value seems to have prevailed. Thus, for example, in October 1862, prices were at 131, while currency was 128.5; in April 1863, prices were 165, currency 151.5. This must also be partially attributed to the fact that merchants felt themselves compelled to charge a price more than correspondent to the rise in the price of gold, in order to compensate themselves for any possible rise which might occur during the period required for the sale of the goods. It is also to be noted, that prices of commodities tended to fluctuate less rapidly than did that of greenbacks expressed in gold. Prices did not always fall when gold fell. Thus, purchasers again were injured.

314. To put the whole case briefly, there was, as appears from the table, an immense rise in the prices of commodities. In October 1864, the prices of 114 articles were 252 per cent. of what they were in 1860, and in January 1865, they were 261 per cent. Being compelled to pay more in exactly that proportion, the incomes of purchasers were correspondingly reduced. The change in the standard from gold to greenbacks thus resulted in an enormous rise in the cost of living, accompanied by rapid and destructive variations in the prices of commodities corresponding roughly to similar variations in the price of greenbacks as expressed in gold.

Summing up, therefore, the result of the issue of the greenbacks upon the distribution of wealth was a vast increase in the cost of living and, although the nominal wages of laborers and those who received salaries increased slightly, a serious fall in their command over the necessaries of life. The fall of prices in 1865–1879, was the form in which the return to the standard manifested itself.

315. This effect upon the prices of commodities was one of the most important influences exerted by the issue of legal tender notes upon the welfare of the people of the United States. The price of a thing is that amount of the standard money of any country in exchange for which the owner of the particular thing in question is willing to part with it. And the standard money of any country is that metal or commodity, or the promise to

pay a unit of metal or commodity in which, by common consent, the values of other commodities are thus stated. From 1834 to the Civil War this standard in the United States had been, in fact, nothing but gold. With the suspension of specie payments by the banks and the government during the last days of 1861, there came about a change in the standard. The important point to be kept in mind was not the character of the mere circulating medium; it was the ultimate standard in which the prices of commodities were measured. The issue of an irredeemable government currency destroyed the existence of the former gold standard and substituted for it a standard of government paper—a standard consisting only of the government's promise to pay. This fact is often forgotten. We often speak as if the paper currency issued by the United States during the Civil War really had some value of its own. This was not the case. The legal-tender notes were recognized at the time as a debt of the United States. They were spoken of as "a forced loan, without interest." Their character as a loan, as "a non-interest-bearing debt," was clearly understood. The standard thus became the government's promise to pay gold in place of that gold itself. The government did not attempt to create dollars; it merely promised to pay them at some indefinite time in the future. The promise was thus robbed of all definiteness. Those who possessed legal-tender notes had no means of knowing at what time they would be enabled by the government to obtain the fulfillment of its promise. The value of the legal-tender note was, in short, regulated by the same forces which controlled that of any other form of government debt. In this case, however, not only was the paper merely a promise, but the time at which it was to be paid was not known. And the introduction of a new element of indefiniteness into what was before indefinite, naturally made the fluctuations in the value of this sort of government promise to pay more extreme than in the case of bonds. The standard of prices was thus subject to violent fluctuations.

Fluctuations in the value of the standard—in other words, in its purchasing power as compared with all commodities—

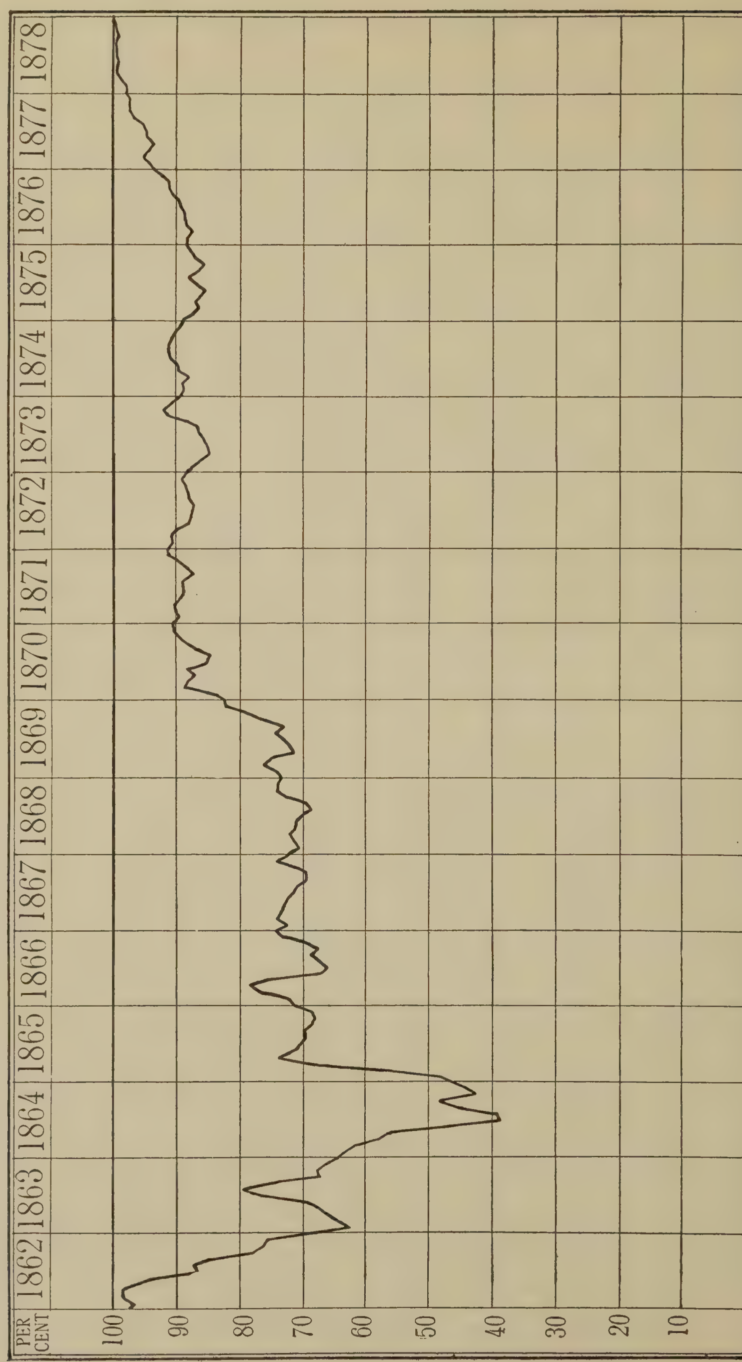
implied that the prices of these commodities (the quantity of the standard which their owners were willing to accept in exchange for them) would also fluctuate widely. And it was a necessary result that these prices should become much higher than they had been before. The credit of the government was in such an unfavorable position that its promise to pay a gold dollar must necessarily exchange for less than such a dollar. That is, the gold dollar would exchange for more than its nominal equivalent in paper.

316. Nothing can be clearer than that the fall of prices after the Civil War could not be assigned to a contraction of the circulation. The effect of such contraction as took place (and it was very much exaggerated) had only an incidental and indirect effect on prices. So far as the policy of the government in contracting the notes (supposed, as they were, to be only a temporary war device) had an effect in strengthening the belief of the public in their future redemption in coin, the value of the paper standard would tend to rise. Since this paper was our only standard, and since prices were necessarily expressed in this standard, as the standard rose in value, prices necessarily fell.

Without any material changes in the quantity of the circulation of the country from 1865 to 1879, we have the remarkable phenomenon (to be observed in Chart XI, showing the depreciation of the greenbacks) of a steadily increasing value of the paper money which served as the standard for prices and contracts throughout the country. No matter what the causes of this rise were, the fact is sufficient for our present purpose. With such a rise in the value of the standard (although not changing in quantity), it was inevitable that prices expressed in that standard should fall. The men of the day falsely attributed the lowered prices to contraction; but there was no contraction to speak of, while there was a phenomenal change going on in the value of the standard. This fall of prices was the necessary sequel to the unprecedented rise after 1862, when, as the paper standard depreciated, prices rose. If the causes which lowered the value of the standard were slowly removed after the war

CHART XI

GOLD VALUE OF $100 IN LEGAL-TENDER NOTES, 1862–1879.



ended, renewed confidence in the ability of the Treasury to resume would naturally follow, and when aided by the Resumption Act of 1875, and later by the accumulation of gold reserves, it was certain that the notes would go to par, irrespective of any further reduction in their quantity. From the war until 1879, the country was suffering from the inevitable penalties incident to a return to the standard from which it had too carelessly departed in 1862; and the causes of its difficulties were wrongly assigned to contraction.

EFFECT OF PAPER ISSUES UPON WAGES.[1]

317. The great rise of prices after 1862 had a damaging effect upon wages, because the latter (in accord with what has been well-known experience in history) did not rise when prices rose. Although receiving the same money wages, when prices rose, earners of wages bought less, and the effect was the same as if wages had been lowered, commodities remaining the same.

It was true that those who received wages were able to demand an increase in their pay on account of the fact that so large a number of the working population were occupied with the war. Nevertheless the increase in wages obtained, even with this assistance, was by no means so great as the increase of prices. In many cases laborers were under long-time contracts to work at certain rates. This was especially the case with those who received fixed salaries—for instance, government employés, clerks of all sorts, and others of the same class. Thus, it is impossible that wages could have followed at all closely the changes in the value of the greenback dollar.

318. In the accompanying table have been represented variations in the prices of 223 articles and money wages, expressed after the same fashion as in the table already given; that is to say, in percentages of the wages and prices of 1860:[2]

	Prices	Money wages
1860, - - -	100.0	100.0
1861, - - -	100.6	100.8
1862, - - -	117.8	102.9
1863, - - -	148.6	110.5
1864, - - -	190.5	125.6
1865, - - -	216.8	143.1

[1] The figures quoted in this discussion are chiefly based upon the statistics furnished by the *Senate Reports, No. 1394*, LII. Congress, Second Session, and *No. 986*, LII. Congress, First Session.

[2] *Senate Report on Wholesale Prices, Wages and Transportation, No. 1394*, I, pp. 91 and 174.

The wages whose variations are represented in this table are those for twenty-one representative industries, in which 767,654 persons were employed. The total number of persons engaged in working for wages during the same year is reported by the census as having been 8,287,043. The returns for wages given in the table are thus for somewhat less than 10 per cent. of all those who were engaged in gainful occupations. The twenty-one industries do not include that of farming, and even for some of the industries included the returns are not very complete. So far as they go, however, the figures afford a basis for a striking comparison between prices and money wages. Whereas prices stood in 1862 at 117.8 per cent. of what they were in 1860, money wages were but 102.9. In 1864 prices were 190.5, wages 125.6. In 1865 prices were 216.8, wages only 143.1. Thus, although the laboring classes were receiving more money, the amount of commodities which they were able to buy with this money had been largely decreased.

In the following table the prices of a certain number of articles estimated to average in their cost 68.6 per cent. of the total expenditures of a family, are compared with the variations in money wages according to the principles of percentage followed in the preceding tables: [1]

	Prices	Wages	Real wages
1860, - - -	100.0	100.0	100.0
1861, - - -	94.1	100.7	107.0
1862, - - -	104.1	103.7	99.6
1863, - - -	132.2	118.8	89.6
1864, - - -	172.1	134.0	77.8
1865, - - -	232.2	148.6	64.0

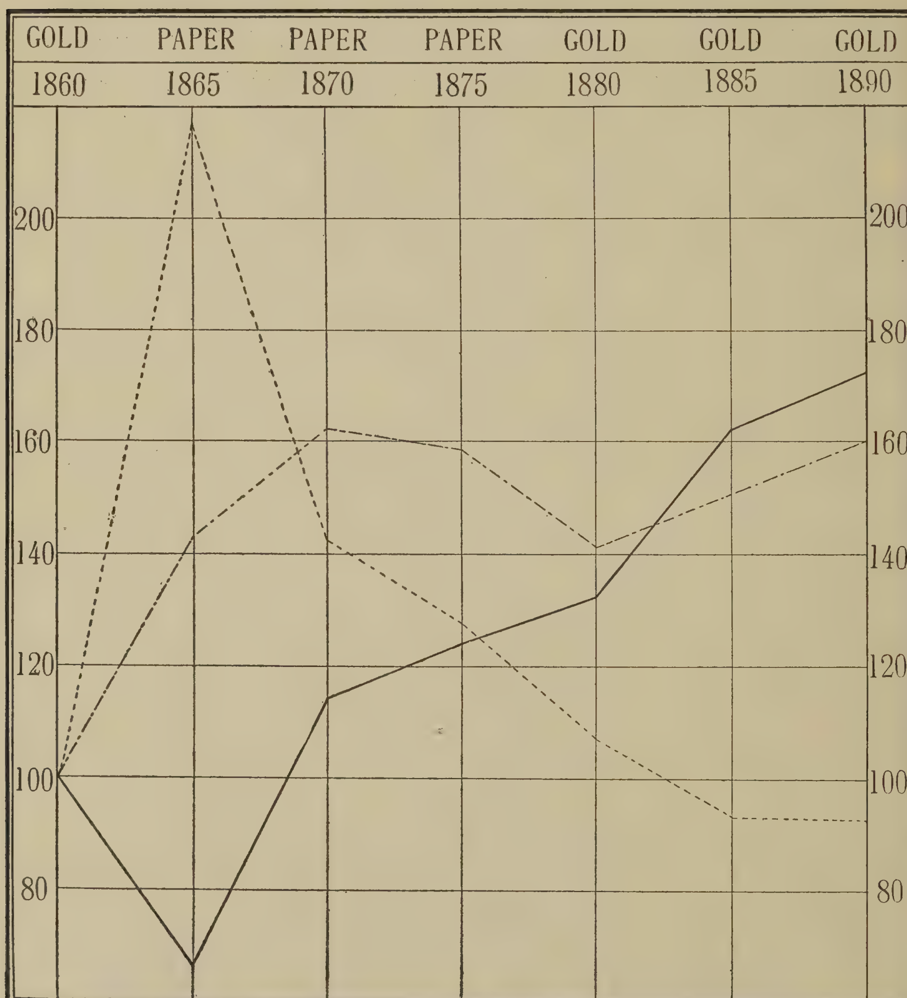
It thus appears that adopting the prices and wages of 1860 as the point of comparison the cost of living in 1865 was 232.2 per cent. of what it was in 1860, while wages amounted to only 148.6 per cent. of what they were in the same year. This may be more clearly understood by stating column 2 of the foregoing table in percentages of column 1. This will give us the value of the real wages, that is to say, the amount of commod-

[1] *Senate Report, No. 1394*, I, pp. 93 and 174.

ities which laborers could purchase in the different years under consideration. This result is given in column 3.

CHART XII[1]

PRICES, WAGES, AND PURCHASING POWER OF WAGES, 1860–1890.



.... Prices.

- — - — - — - Wages.

———————— Purchasing power.

[1] Reproduced from ATKINSON, *The Money of the Nation.*

It is thus seen that in 1865, with largely increased money wages, laborers could purchase only 64 per cent. of what they could buy in 1860.

The lesson of these tables may be understood at a glance from the accompanying diagram, in which the course of prices, wages, and the purchasing power of these wages, have been represented. The divergence in 1865 of the lines representing prices and the purchasing power of wages is most striking. It is seen that these two lines tend in precisely opposite directions, average prices reaching 216.8, while average purchasing power falls to 64.

319. For industries other than the twenty-one already referred to, returns are scanty. It has been computed that during the period from 1861 to 1866, the wages of farm labor increased about 50 per cent., which of course, would be much less than the increase in the cost of living. The following table represents the change in the money wages of the farm laborer:

	Money wages
1860, - - - -	100.0
1861, - - - -	99.5
1862, - - - -	103.1
1863, - - - -	121.6
1864, - - - -	144.0
1865, - - - -	157.1

Professional services and salaries corresponded to the changes in the value of the currency even more slowly. As an example of this, reference may be made to the salaries of school-teachers in St. Louis, Boston, Cincinnati and Baltimore, and to those of teachers in the country districts of Massachusetts. These may be represented as follows in percentages of the wages paid in 1860 as 100:[1]

	Money wages	
	City schools	Country schools
1860, - - - -	100.0	100.0
1861, - - - -	90.8	98.3
1862, - - - -	93.7	99.4
1863, - - - -	100.0	99.0
1864, - - - -	132.3	102.9
1865, - - - -	134.7	121.5

[1] *Senate Report, No. 1394*, I, pp. 187 and 189.

It thus appears that the increase in the wages of teachers was not in any way proportionate to the increase in the cost of living. The rise in these wages did not even proceed as rapidly as that in the wages of ordinary labor.

This loss was likewise felt by all the officials of the government.[1] To those occupying high offices the inconvenience was not slight. Even for such positions, the salaries paid by the United States had always been small, and when the purchasing power of such salaries was decreased by one-half the effect was serious. But the loss must have been more severely felt by those in places whose pay was small and where honor constituted no part of the return. The great increase of administrative business due to the war had necessitated large additions to the force of employés in the different departments. As prices rose the cost of living became very expensive. Clerks whose salaries had before enabled them to make some savings, now found that their expenses were outrunning their incomes. That many of these men suffered in consequence there can be no doubt. There was one way of escape, but a way that was embarrassing to the administration. Although government employés had received no increase of pay, the return to clerks employed by private persons had increased. The result was that the competent and experienced clerks, who could no longer live on their salaries, were forced to leave the government employ and to accept positions in business houses. Their places could be filled on the existing scale of pay only by employing less competent men, much to the detriment of the government's interests. The reports of heads of departments and of bureaus for 1864 and 1865 are full of such complaints, and urgent requests were sent to Congress to sanction an increase of the pay of their assistants. The depreciation of the currency was thus a cause of considerable inconvenience, and even financial loss, to the government, in disorganizing the public survice when the need of efficiency was the greatest; and a cause of suffering to those clerks who remained in the government employ.

[1] For the following discussion of the wages of government employés, soldiers, etc., see the paper already referred to, *Journal of Political Economy*, March 1897, pp. 151–156.

320. But there was another and a larger class of men in the service of the government whose case was perhaps even more unfortunate—the sailors and soldiers.

At the outbreak of the Civil War the pay of privates in the army was what it had been since 1854, $11 per month. One of the first of the war measures, enacted August 6, 1861, increased this pay to $13 a month. In 1862, with the suspension and the issue of inconvertible paper money, the depreciation commenced. As it proceeded, the purchasing power of the soldiers' pay steadily declined. From $13 in 1861 its value declined until by the end of 1862 it would purchase less commodities than would $10 in specie. In 1863 it was less than $9 for the first six months; but the series of great victories in July—Gettysburg, the surrender of Vicksburg and Port Royal—improved the credit of the government and increased the value of its notes. Accordingly the value of the soldiers' pay appreciated until it reached $10.33⅓ in August. Another relapse followed, and by December it was but $8.50. The next year, 1864, the fall continued. By April, it had gone so far as to reduce the specie value of the pay to $7.50. At this stage of affairs, the distress of the army had become such that Congress undertook to alleviate it. Rejecting a proposition to pay the $13 a month in gold, or in an amount of paper equivalent at the market rate to $13 in gold, it added $3 to the pay. This raised the stipend to $16 per month in greenbacks.

This increase took effect May 1, 1864. The immediate result was to increase the specie value of the pay for that month to $9. But, unfortunately, during the next two months the depreciation of the greenbacks was more rapid than ever before. So great was the fall that the nominal increase was more than offset, and the specie value of the pay reduced to its lowest point. For the month of July, $16 in paper was worth but $6.19 in specie, less than one half what the pay had been at the lower rate before the issue of the greenbacks.

After this, matters began to mend, at first slowly, then more rapidly. By the end of the year the pay was worth about $7. The following spring brought the surrender of Lee and the col-

lapse of the Confederacy. These events exercised a powerful upward influence upon the value of the greenbacks. By May, $16 was equivalent to $11.80 in specie. But after that there was another, though not a great decline. During the summer, when a large part of the army was paid off and mustered out of service, the value of a month's wages averaged about $11.

VARIATIONS IN THE SPECIE VALUE OF A SOLDIER'S MONTHLY PAY; JULY 1861 TO DECEMBER 1865.

	Monthly pay					Specie value of $1.00 currency				
	1861	1862	1863	1864	1865	1861	1862	1863	1864	1865
January	....	$13	$13	$13	$16	......	$0.976	$0.689	$0.643	$0.463
February	....	13	13	13	16	......	.966	.623	.631	.487
March	....	13	13	13	16	......	.982	.647	.614	.575
April	....	13	13	13	16	......	.985	.660	.579	.673
May	....	13	13	16	16	......	.968	.672	.567	.737
June	....	13	13	16	16	......	.939	.692	.475	.714
July	$11	13	13	16	16	$1	.866	.766	.387	.704
August	13	13	13	16	16	1	.873	.795	.394	.697
September	13	13	13	16	16	1	.844	.745	.449	.695
October	13	13	13	16	16	1	.778	.677	.483	.687
November	13	13	13	16	16	1	.763	.676	.428	.680
December	13	13	13	16	16	1	.756	.662	.440	.684

	Specie value of soldiers' pay				
	1861	1862	1863	1864	1865
January	......	$12.69	$8.96	$8.36	$7.41
February	......	12.56	8.10	8.20	7.79
March	......	12.77	8.41	7.98	9.20
April	......	12.81	8.58	7.53	10.77
May	......	12.58	8.74	9.07	11.79
June	......	12.21	9.00	7.60	11.42
July	$11	11.26	9.96	6.19	11.26
August	13	11.35	10.34	6.30	11.15
September	13	10.97	9.69	7.18	11.12
October	13	10.11	8.80	7.73	10.99
November	13	9.92	8.79	6.85	10.88
December	13	9.83	8.61	7.04	10.94

These fluctuations in the value of the pay of the soldiers are more exactly shown in the preceding table, which exhibits the equivalent in specie of the wages paid to the privates of the

army by months, from July 1861 to the close of 1865. Chart XIII (page 478) gives a graphic representation of the decline of the specie value of the pay.

VARIATIONS IN THE PURCHASING POWER OF A SOLDIER'S MONTHLY PAY OVER COMMODITIES.[1]

	Relative prices	Average monthly pay of private for the quarter	Purchasing power of monthly pay over commodities	Specie value of the pay
1860–January	100	..	......	......
1861–July	95	$12⅓	$12.98	$11.00
October	125	13	10.40	13.00
1862–January	113	13	11.50	12.69
April	112	13	11.61	12.81
July	117	13	11.11	11.26
October	131	13	9.92	10.11
1863–January	145	13	8.81	8.96
April	165	13	7.88	8.58
July	161	13	8.07	9.96
October	161	13	8.07	8.80
1864–January	188	13	6.91	8.36
April	199	15	7.54	7.53
July	250	16	6.40	6.19
October	252	16	6.39	7.73
1865–January	261	16	6.13	7.41
April	208	16	7.69	10.77
July	193	16	8.29	11.26
October	214	16	7.47	10.99

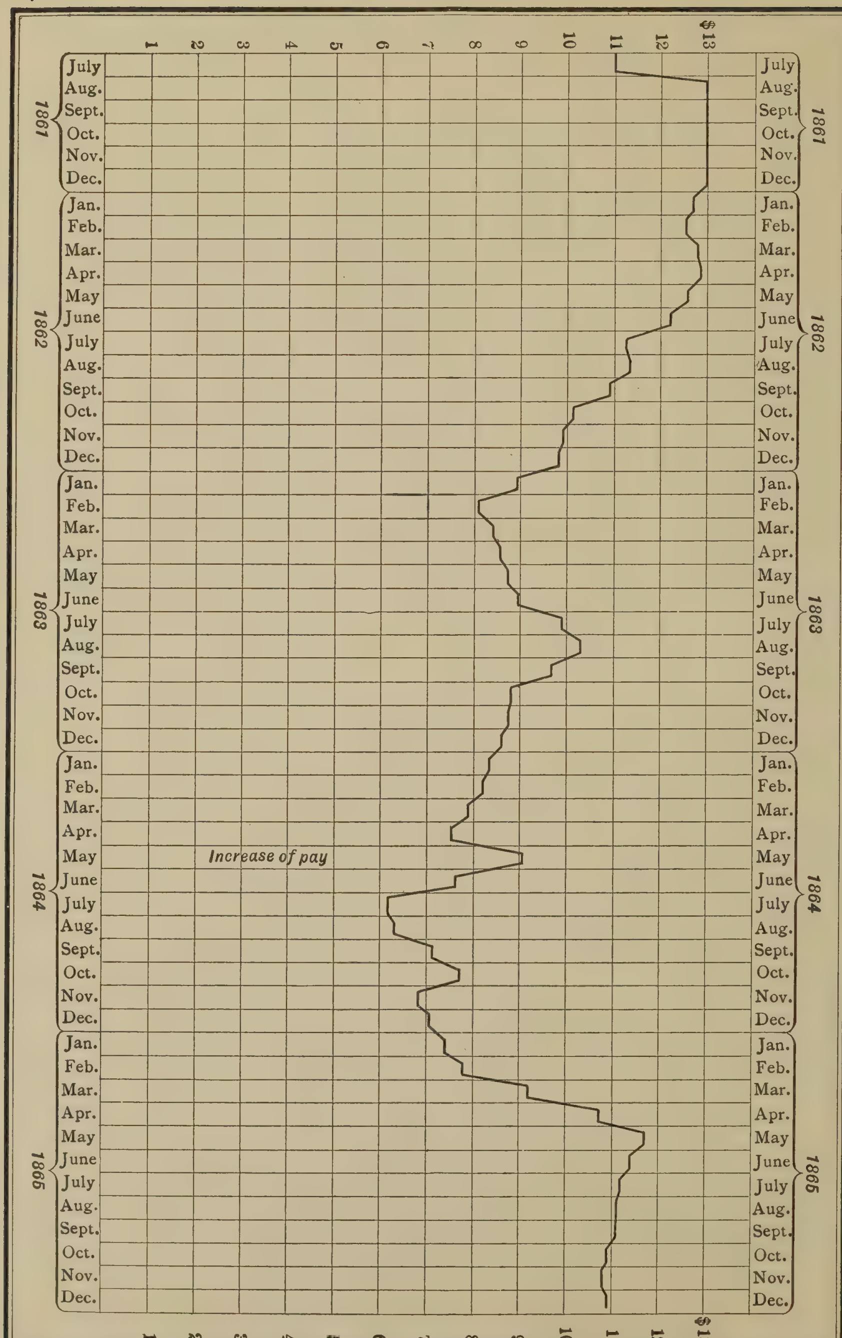
Perhaps this decline in the amount of commodities which the soldiers could buy with their pay was the most regrettable result of the issue of the greenbacks. The addition of hundreds of millions to the public debt was a more dramatic outworking of the policy, and one that has attracted more attention. But it is probable that those who suffered most keenly from the depreciation of the currency were the soldiers on the field of battle, and their families at home who were largely dependent for their support upon $13 a month.

321. It is also to be observed that in the period after the

[1] It will be observed that the purchasing power of the pay is shown to be less by the use of the commodity standard than by the specie value of the currency. However, as was suggested above, a part of this rise of prices would probably have occurred during the war even on a specie basis.

CHART XIII

SPECIE VALUE OF A SOLDIER'S PAY.



Civil War, when the paper standard was slowly rising until it reached par in 1879—in the period when prices were falling—the laborer's condition was improving. As prices fell, his wages had greater purchasing power. A casual study of Chart XII will show that from even before 1870, the line representing the purchasing power of wages steadily rose as prices fell. By 1890, while prices were only 92.3 per cent. of what they had been in 1860, wages were 158.9 per cent. of what they had been in 1860, and these wages bought 172.1 per cent. of what the wages of 1860 obtained. In short, while producers and employers were complaining of the fall of prices (due to a rise in the value of the paper standard), the great body of laborers were being benefited in a corresponding proportion.

THE RETIREMENT OF THE UNITED STATES NOTES.

322. From the brief history of the United States notes which has been given it will be apparent that these notes were issued in time of war under the plea of necessity. The government, feeling itself unable at the time to borrow, through the ordinary channels, the vast sums needed for carrying on the war, resorted to the issue of legal-tender paper as a means of floating a forced loan without interest. Even so, however, the intention was clearly expressed that the debt thus contracted should be paid at an early day. For it was recognized that these obligations were but debts ; the United States note was not standard money ; it was merely a promise to pay that kind of money. Given power to cancel debts equal to that possessed by the money it promised to pay, the United States note became an instrument for unsettling business and working an immense amount of injustice. This, then, constitutes one reason for the payment of these notes of the United States at the earliest possible date. Such payment would only be fulfilling a promise made years ago. Whatever the sentimental considerations which may gather about the greenback, they are outraged by the proposition to abandon this principle of early payment which underlay its origin.

The dangers and evils of a depreciating standard have been too recently experienced in this country to permit the continuance of our government paper without menace to our business. So long as these notes remain, the knowledge that they have once constituted a depreciated and fluctuating currency will continue to fill the minds of our business men with apprehension, and thus act as a constant drag upon that perfect confidence which the fullest measure of prosperity demands.

323. As against all arguments for the retirement and cancellation of the United States notes, the apologists for such a currency point only to the saving of interest to the government

which they effect. If the government, needing money to meet its expenses, finds that the community will accept its notes without interest, it can by issuing them save the interest which it would otherwise have to pay upon the bonds sold to raise the funds required. As, however, it has to keep on hand some reserve of money in order to maintain the constant redemption of the notes in standard money, the government can in any case save the interest only on the difference between the notes which it has issued and the gold reserve which it keeps for their redemption. But, even after making full allowance for this reserve, the fact remains, it is pointed out, that the government has for years been saving the interest upon some $200,000,000.

This, however, is but one side of the account. On the other side must be mentioned all those items of special cost which must be charged against the greenbacks, and several considerations of public policy which would go far to outweigh any saving of interest which might actually exist. The first of these is the considerable expense involved in printing, counting, registering, handling, and redeeming a paper currency. A large part of this expense is so interwoven with other Treasury operations that it cannot be separately stated. But the actual cost of the special operations chargeable to government paper alone amounts to more than $1,000,000 a year. This, then, is one item which must be set off against the saving of interest.

324. Another fact of supreme importance in weighing the advantages and disadvantages of our government demand obligations, is that this saving of interest—whatever it may be—is at the expense of the credit of the government and is overbalanced by occasional heavy sacrifices. This principle is fully recognized in ordinary business life. Many a merchant who might borrow on call at 1½ per cent. interest, actually prefers to borrow on time at 4 or 5 per cent.—notwithstanding the apparent saving of interest in borrowing on call. The reasons for this preference are obvious. In the first place, he realizes that if he makes large demand loans at a low rate of interest, or even at no interest at all, though for a time everything may move smoothly and none of his obligations be presented in such

a way as to embarrass him, nevertheless at the least rumor of threatened insolvency he will be called upon to meet these obligations. In other words, he will be called upon to pay them at the very time when he is least able to do so; and the sacrifice which he will have to make at such a time to raise the necessary sum to pay off his demand loans will more than counterbalance the previous saving of interest. This is one of the reasons why a good business man will never permit a large amount of his demand notes to remain outstanding.

The same considerations apply to the demand obligations of a government. Though it may for a time be able to save considerable amounts of interest by issuing its demand obligations without interest, the special expense and loss involved in having to secure funds at a great sacrifice at the particular time when its credit is no longer good and when its obligations are presented for payment, are likely to more than counterbalance the saving of interest. So long as the credit of the government is high, and there is no question as to its ability and intention to pay all of its obligations in the best money, it is not probable that many will be presented. This is what happened in the United States prior to about 1890. But whenever the notes are presented (except because of redundancy, or to a slight extent as a convenient means of obtaining gold for jewelers' uses, etc.), it will be because, for some reason, the credit of the government is impaired, and the public has lost confidence in its ability or intention to pay these obligations in accordance with the accepted understanding of the terms. At such a time, the same considerations which lead to the presentation for payment of the government's demand obligations will also make heavy sacrifices necessary in order to raise the requisite funds promptly. This is the reason why the bonds sold in 1894–1896 netted the government some $40,000,000 less than the amounts for which the same bonds could have been sold a few years earlier, when public apprehension had not been so much aroused. In 1890 and 1891 United States 4 per cent. bonds of 1907 were selling at from 120 to 125. On the basis of even the lowest of these prices the 5 per cent. bonds of 1904 which were sold in 1894

would have been worth more than 122; the 4 per cent. bonds of 1925 sold in 1895 would have been worth about 132, and those sold in 1896 about 131. Had these bonds been sold gradually in those earlier years when there was no public apprehension, instead of being thrown in large quantities on an over-sensitive market, when the credit of the government was shaken by a rapid presentation of notes for redemption, resulting in a depletion of the gold reserve, they would have bought, on the basis of prices in 1891, over $335,000,000 instead of the $293,400,000 which was actually received. This difference of over $40,000,000 is another sum which must set off against the saving of interest.

This, however, is not all. The merchant who borrows on time at 4 or 5 per cent. and arranges his loans in such a way that he knows just when he will have to meet them, in preference to borrowing on call at 1½ per cent., appreciates thoroughly that his credit in the community is thereby strengthened. The loaning public views with suspicion a man with a large amount of demand paper outstanding—not because the amount is more than he could meet with ease if he knew, long enough in advance, when he would have to meet it, but because his insolvency is likely to be precipitated at any time by the presentation of a large amount of this paper at an unexpected moment. The merchant's credit is therefore better, and he is able to borrow on time at uniformly lower rates, if it is understood that his loans are so adjusted as to fall due at times when arrangements can be made to meet them. This analogy applies in large part to the action of governments. For unquestionably the popular apprehension, raised and maintained by the existence of a large amount of government demand obligations, has had a decided tendency, throughout all the years in which this apprehension has existed, to increase the rate at which the government could borrow.

But aside from the direct loss to the government through the lower prices realized for bonds when sold at the time that shaken confidence leads to the presentation of the notes, our greenback currency has, directly or indirectly, caused untold losses to the business interests of the country. Constantly before

the eyes of the public as a large governmental demand obligation, they have added greatly to the apprehension growing out of the increasing difficulty in maintaining a parity between our gold and silver coins. In this way, they have been responsible for much of the shock to confidence and the accompanying business depression which we have witnessed in the last five years. The amount of this loss is not calculable, but it must be evident to every careful observer that it has been enormous.

325. Another great objection to the United States notes is the lack of any connection between the note-issues and commercial demands. Even if such a currency did result in a net saving, after making full allowance for the other considerations which have been suggested, it would still not be clear that it was a desirable currency; for it is much less serviceable to the community than a properly adjusted bank currency. The latter, as fully explained in Part II of this report, is elastic: it expands and contracts automatically with varying demands; there is never so much that a redundancy breeds speculation and endangers legitimate business; there is never so little that the convenient transaction of business is hampered through the fact that the actual supply of currency is less than legitimate demands. Our system of United States notes, however, is absolutely irresponsive to business needs. The amount of such currency is fixed. In times of extraordinary need no additional supply is forthcoming, and when the need for currency lessens the supply must remain the same. At such times it piles up in the financial centers and breeds speculation. It is thus much more rigid and inelastic than a currency of gold; for the latter will be increased by imports if more is needed; and, if redundant, a portion will be shipped abroad. The greenback currency has no connection with the needs of business, but is put out by the government only in the payment of its expenses. The bank-note, on the contrary, is developed from the exchanges of property which give rise to a demand for more currency. It is a commercial device, and if left free to do so, will serve commerce economically and effectively.

326. A most important consideration still remains to be

noted. The saving of interest, which has been held up as the all-sufficient reason for the existence of the greenback, is, as a matter of fact, no saving at all. What has been saved to the government, and thus to the tax-payers, has been taken from the community as a whole. There is no way in which a government can make something out of nothing. The United States notes have merely been substituted in the fields of general circulation for expedients like bank-notes, which the community itself would otherwise have evolved if left free to do so. As shown in earlier sections of this Report, the benefit arising from every economy of this sort which the community makes, even though the immediate instrumentality may be the banks, is diffused eventually through the whole community.

That is to say, if the mechanism of exchange comes to be carried on with the use of a less expensive tool than gold, the saving is one which, by diffusion, goes to the whole community. A little thought will indicate the process through which this is brought about. When any community which previously used actual money as a medium of exchange, takes up the use of bank-notes and deposits as a currency with which to transact its business, the first step is that the banks find themselves able to increase their loans very largely. Assuming that it is necessary for them to carry a reserve of 25 per cent. against their demand liabilities, they are able to increase their loans to the extent of 75 per cent. of the notes and deposits which the community then uses. So far as the community is concerned, this is practically the same as an increase of loanable funds, and its effect will be to lower the rate of interest upon loans to the same extent as the introduction from outside into that community of an equal amount of capital would have done. It might appear at first thought that the benefit would go to the banks, inasmuch as they would be enabled to increase their loans without securing additional capital. However this might be where banking was a monopoly, it is very clear that where the field is open to full competition, as in the national banking system, there can be no larger profits secured in banking than in other occupations. The result of the competition of the

banks in the system for borrowers to take up the increased funds would inevitably be a lower rate of interest. A portion of the banking capital would be rendered superfluous at existing rates of interest, and would be driven out of banking into other occupations. Not only would the rate of interest be lowered, but by that lower interest certain occupations depending upon borrowed capital would be made more profitable than before, and thus attract capital from banking into other occupations. But the benefits of lower interest would not remain merely with those who borrow at banks, or even with all borrowers, but, through the reduction of one element in the cost of producing commodities the saving effected is handed on to producers and thence to consumers.

So that if, instead of the issue of $200,000,000 of government credit currency, the community had been left free to evolve its own medium of exchange in a natural way, it not only would have had a currency more serviceable, because more responsive to its needs, but in evolving this currency it would have secured for itself the saving which resulted. This is precisely what has taken place in the development of that most important medium of exchange — deposits — used by our commercial communities; and it is precisely what would have taken place in our rural communities, if they had been left free to improvise the kind of currency needed for the convenient transaction of their business — bank-notes.

SEPARATION OF THE FISCAL AND MONETARY FUNCTIONS OF THE TREASURY.

327. Pending the ultimate payment of the demand obligations of the government and their final withdrawal from circulation and cancellation, there are many considerations which demand that better provision should be made for their immediate redemption.

Heretofore there has been no separation of the monetary and fiscal functions of the Treasury. There has been no special fund devoted to the payment of the United States notes; all the Treasury obligations, whether connected with the currency or not, have been allowed to draw upon a common fund; nor has there been

any method of meeting temporary deficiencies in the revenue except by the impairment of the general Treasury balances, and an accompanying weakening of the reserve available for the redemption of the United States notes. Thus the redemption of a large portion of our currency is dependent upon a favorable balance between the revenues and expenditures of the government. If the government had no such demand outstanding obligations serving as a part of the currency with which business is carried on, a deficiency of revenue would be of little importance to business; everyone would know that it could easily be cured by the increase of revenue or by reduction of expenditures. Private credit, which would be the basis of most commercial transactions, would not be affected at all, and public credit only slightly, if at all; but under existing circumstances any serious deficiency in revenue produces uncertainty in all contracts and disturbance in business, because it raises apprehension as to the ability of the government to maintain redemption of the currency.

These considerations make it expedient that so long as the United States notes remain as a part of our currency, there should be set aside for the maintenance of their redemption some definite reserve which cannot be impaired by drafts for other purposes. The Commission has, therefore, recommended the establishment of a Division of Issue and Redemption to which shall be transferred an amount of gold equal to 25 per cent. of the aggregate United States notes and Treasury notes, and 5 per cent. of the silver dollars heretofore coined; the silver dollars and bullion now held against the Treasury notes are also to be transferred to this Division. The sale of this bullion, as opportunity may offer, will add to the gold reserve thus established; while the provision for appropriation of surplus revenue from time to time, and the power given to sell bonds[1] for gold if

[1] The recommendations of the Commission touching the sale of government obligations for the purpose of maintaining the gold reserve are two in number: (1) that the Secretary be authorized to borrow upon bonds of low denomination, bearing a low rate of interest, and running for a short term only; and (2) that the Secretary be authorized to receive payments at all money order post-offices in sums of not less than $50, recording the amounts so borrowed upon the books of the Treasury,

necessary, insure the maintenance of whatever reserve experience shall prove necessary. It is not intended to require that the 25 per cent. reserve with which the Division is to be inaugurated should be maintained at all times; indeed, it is quite probable that with the opportunity to sell gold bonds at any time, perfect

and issuing certificates therefor (instead of selling bonds of the usual form). Two main objects will be attained by these provisions, (1) the small capitalist will be enabled to become an investor in government securities, and (2) the debt will therefore be owned in much smaller lots than at present. In this way, persons living in those portions of the country where savings banks are few or are unreliable in character will be provided with a form of investment. At the same time the debt will be much more largely owned at home than is now the case and greater stability in public credit will thereby be assured.

These recommendations are based upon the best current practice of other countries. Not to multiply examples, the *rente* of France and the public debt of England may be cited as instances showing how the system of "inscription" operates. *Rente* is the name given to the French government obligations and represents the annual interest on credits inscribed upon the so-called *Grand-Livre* or great ledger of the Public Debt of France. *Rentes* are of several kinds: They may be either annuities (a fixed annual payment during the life of the owner); or perpetual *rentes*, in which case the owner cannot demand repayment of his loan although it may, practically, be repaid at the pleasure of the state; or ámortisable *rentes*, in which the capital is divided into 175 series, annually reimbursable by lot, and extinguishable at the end of 75 years.

Rentes may be obtained through subscription by private individuals, in sums as low as three francs at a payment; and a large portion of the French public debt has been so contracted. The payments, made by subscribers to the *rente*, are received by the fiscal agents of the government, and are registered in an auxiliary ledger which is kept by the general receiver of taxes in each of the departments. The accounts of each of these ledgers are transferred to the great ledger at Paris. The subscriber, upon making his payment, receives a debt-certificate running somewhat as follows: "The Director of the inscribed debt certifies that A is registered upon the Great Ledger of the —— per cent. debt for an annual payment [rente] of ——— francs with interest thereon since ——— 18—." The *rente* credit may be transferred to the ledger of any other department than that where it originated. Several certificates may be exchanged for one or they may be transferred to other owners. On selling *rente* the owner signs a certificate of transfer to which is also appended the signature of a duly authorized notary. This document and the old certificate of inscription are handed to the local government transfer inscription-office with a document in which the *rente* is stated by the government agent to be the lawful property of the seller, and wherein he certifies that the buyer is the person indicated. A certificate is then issued in return and when this is handed in by the purchaser two days later the new certificate of inscription is issued.

Interest is paid upon the subscriber's showing his certificate; but, in case (as is most usual) the certificate is made out in the name of the subscriber, it will be paid only at that place where the *rente* is at that time registered. Certificates may be

confidence and ability to redeem all notes presented would be secured with a reserve much smaller. This, however, is a matter which might well be left to the discretion of the Secretary of the Treasury.

personal or they may be payable to bearer, and in that case are provided with coupons or they may run in the name of the subscriber but are furnished with bearer-coupons. The two latter classes are given out only to persons who have full legal control over their property. They are not given out for 4 and 4½ per cent. *rentes.*

In case the personal certificates of *rente* are lost, new ones will be given out upon proper declaration and demand by the owner, before specified civil authorities. The same will be done in the case of the *rente* running in a specified name but with bearer-coupons, provided the state be guaranteed against loss on the latter. Bearer-rentes will be renewed in case of loss, upon the owner's making a declaration of loss and complying with prescribed regulations intended to guarantee the government against double payment of coupons.

In England, the control of the debt has been placed by the state in the charge of the Bank of England, which receives a commission of £300 upon every £1,000,000 of debt transferred. This commission amounts annually to about £200,000. In floating loans, the state offers on each £100 of nominal value of the debt from 2½ to 5 per cent. interest, the quotation at which the securities are issued being regulated by reference to the rate of interest paid. The individual subscribes at a stockbroker's for the sum he desires, and then pays into the bank an amount reckoned according to the quotation of the debt. This debt is redeemable at the pleasure of the state, and only the annual interest can be demanded by the lender. The nominal amount of the loan is registered by the bank opposite the name of the subscriber in a "great ledger" containing the names of all creditors on account of the public debt. In order to draw the interest when due the subscriber must present himself either in person or through an accredited representative at the bank in London. Here he signs a receipt for the interest, the signature of another person who shall vouch for the identity of the recipient being required in the payment of the larger sums, and receives a warrant which may be cashed at the paying-office.

Ownership of portions of the public debt may be transferred as follows: the clerk of the stockbroker selling the title to the debt presents himself at the bank and informs himself with what amount the seller is credited. The seller then fills out and signs a formula transferring the amount to the purchaser. At the same time it must be signed by two guarantors of his identity, and if the purchaser is willing his signature is obtained as well. The credit is then transferred on the great ledger.

Creditors may receive certificates in denominations of £50 and multiples thereof with five-year coupons payable to bearer. In case the certificate be lost the owner may prove the loss and, upon his personal bond, receive a new certificate.

For more complete information see SAY: *Dictionnaire des Finances*, II, pp. 1051–1072; and *Schanz' Finanz-Archiv*, I, pp. 269 *et seq.*

APPENDIX I

MONETARY LEGISLATION OF THE UNITED STATES

APPENDIX I.

DIGEST OF LAWS OF THE UNITED STATES RELATING TO COINAGE, CURRENCY, AND BANKING.

[Chronologically arranged.]

CONSTITUTION OF THE UNITED STATES.

ART. I, SEC. 8, PAR. 5. The Congress shall have power * * * to coin money, regulate the value thereof, and of foreign coin, and fix the standard of weights and measures.

ART. I, SEC. 10, PAR. 1. No state shall * * * coin money; emit bills of credit; make anything but gold and silver coin a tender in payment of debts; * * *.

ACT OF APRIL 2, 1792.—An act establishing a mint and regulating the Coins of the United States.

[1 Statutes at Large, p. 246.]

SECTION 1. *Be it enacted, etc.*, That a mint for the purpose of a national coinage be, and the same is established; to be situate and carried on at the seat of the government of the United States, for the time being: And that for the well conducting of the business of the said mint, there shall be the following officers and persons, namely,—a Director, an Assayer, a Chief Coiner, an Engraver, a Treasurer.

[SECS. 2, 3, 4, 5, 6, 7, and 8 relate to the duties of the several mint officers, their oaths, bonds, salaries, and accounts, and the maintenance of the mint.]

SEC. 9. *And be it further enacted*, That there shall be from time to time struck and coined at the said mint, coins of gold, silver, and copper, of the following denominations, values and descriptions, viz. Eagles — each to be of the value of ten dollars or units, and to contain two hundred and forty-seven grains and four-eighths of a grain of pure, or two hundred and seventy grains of standard gold. Half Eagles — each to be of the value of five dollars, and to contain one hundred and twenty-three grains and six-eighths of a grain of pure, or one hundred and thirty-five grains of standard gold. Quarter Eagles — each to be of the value of two dollars and a half dollar, and to contain sixty-one grains and seven-eighths of a grain of pure, or sixty-seven grains and four-eighths of a grain of standard gold. Dollars or units — each to be of the value of a Spanish milled dollar as the same is now current, and to contain three hundred and seventy-one grains and four-sixteenth parts of a grain of pure, or four hundred and sixteen grains of standard silver. Half Dollars — each to be of half the value of the dollar or unit, and to contain one hundred and eighty-five grains and ten-sixteenth parts of a grain of pure, or two hundred and eight grains of standard silver. Quarter Dollars — each to be of one-fourth the value of the dollar or unit, and to contain ninety-two grains and thirteen-sixteenth parts of a grain of pure, or one hundred and four grains of standard silver. Dismes — each to be of the value of one-tenth of a dollar or unit, and to contain thirty-seven grains and two-sixteenth parts of a grain of pure, or forty-one grains and three-fifth parts of a grain of

standard silver. Half Dismes—each to be of the value of one-twentieth of a dollar, and to contain eighteen grains and nine-sixteenth parts of a grain of pure, or twenty grains and four-fifth parts of a grain of standard silver. Cents—each to be of the value of the one-hundredth part of a dollar, and to contain eleven pennyweights of copper.[1] Half Cents—each to be of the value of half a cent, and to contain five pennyweights and half a pennyweight of copper.

[SEC. 10 specifies the devices to appear upon the coins authorized.]

SEC. 11. *And be it further enacted*, That the proportional value of gold to silver in all coins which shall by law be current as money within the United States, shall be as fifteen to one,[2] according to quantity in weight, of pure gold or pure silver; that is to say, every fifteen pounds weight of pure silver shall be of equal value in all payments, with one pound weight of pure gold, and so in proportion as to any greater or less quantities of the respective metals.

SEC. 12. *And be it further enacted*, That the standard for all gold coins of the United States shall be eleven parts fine to one part alloy; and accordingly that eleven parts in twelve of the entire weight of each of the said coins shall consist of pure gold,[3] and the remaining one-twelfth part of alloy; and the said alloy shall be composed of silver and copper, in such proportions not exceeding one-half silver as shall be found convenient; to be regulated by the director of the mint for the time being with the approbation of the President of the United States, until further provision shall be made by law. And to the end that the necessary information may be had in order to the making of such further provision, it shall be the duty of the director of the mint at the expiration of a year after commencing the operations of the said mint to report to Congress the practice thereof during the said year, touching the composition of the alloy of the said gold coins, the reasons for such practice, and the experiments and observations which shall have been made concerning the effects of different proportions of silver and copper in the said alloy.

SEC. 13. *And be it further enacted*, That the standard of all silver coins of the United States, shall be one thousand four hundred and eighty-five parts fine to one hundred and seventy-nine parts alloy; and accordingly that one thousand four hundred and eighty-five parts in one thousand six hundred and sixty-four parts of the entire weight of each of the said coins shall consist of pure silver, and the remaining one hundred and seventy-nine parts of alloy; which alloy shall be wholly of copper.[3]

SEC. 14. *And be it further enacted*, That it shall be lawful for any person or persons to bring to the said mint gold and silver bullion, in order to their being coined; and that the bullion so brought shall be there assayed and coined as speedily as may be after the receipt thereof, and that free of expense to the person or persons by whom the same shall have been brought.[4] And as soon as the said bullion shall have been coined, the person or persons by whom the same shall have been delivered, shall upon demand, receive in

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[1] Weight changed by Act of January 14, 1793, to 208 grains of copper; and on January 26, 1796, by proclamation of the President under authority of Sec. 8 of Act of March 3, 1795, to 168 grains.

[2] For change of coinage ratio, see Act of June 28, 1834, and Act of January 18, 1837, Secs. 8, 9, 10.

[3] See Act of January 18, 1837, Sec. 8.

[4] The retention of sufficient bullion to cover expenses of refining directed by Act of March 3, 1795, Sec. 5; Act of May 27, 1796; April 24, 1800.

lieu thereof coins of the same species of bullion which shall have been so delivered, weight for weight, of the pure gold or pure silver therein contained: *Provided, nevertheless*, That it shall be at the mutual option of the party or parties bringing such bullion, and of the director of the said mint, to make an immediate exchange of coins for standard bullion, with a deduction of one-half per cent. from the weight of the pure gold, or pure silver contained in the said bullion, as an indemnification to the mint for the time which will necessarily be required for coining the said bullion, and for the advance which shall have been so made in coins. And it shall be the duty of the Secretary of the Treasury to furnish the said mint from time to time whenever the state of the Treasury will admit thereof, with such sums as may be necessary for effecting the said exchanges, to be replaced as speedily as may be out of the coins which shall have been made of the bullion for which the monies so furnished shall have been exchanged; and the said deduction of one-half per cent. shall constitute a fund towards defraying the expenses of the said mint.

SEC. 15. *And be it further enacted*, That the bullion which shall be brought as aforesaid to the mint to be coined, shall be coined, and the equivalent thereof in coins rendered, if demanded, in the order in which the said bullion shall have been brought or delivered, giving priority according to priority of delivery only, and without preference to any person or persons; and if any preference shall be given contrary to the direction aforesaid, the officer by whom such undue preference shall be given, shall in each case forfeit and pay one thousand dollars; to be recovered with costs of suit. And to the end that it may be known if such preference shall at any time be given, the assayer or officer to whom the said bullion shall be delivered to be coined, shall give to the person or persons bringing the same, a memorandum in writing under his hand, denoting the weight, fineness and value thereof, together with the day and order of its delivery into the mint.

SEC. 16. *And be it further enacted*, That all the gold and silver coins which have been struck at, and issued from the said mint, shall be a lawful tender in all payments whatsoever, those of full weight according to the respective values herein before declared, and those of less than full weight at values proportional to their respective weights.

[SECS. 17, 18, and 19 provide for the preservation of accuracy in the fineness and weight of coin.]

SEC. 20. *And be it further enacted*, That the money of account of the United States shall be expressed in dollars or units, dismes or tenths, cents or hundredths, and milles or thousands, a disme being a tenth part of a dollar, a cent the hundredth part of a dollar, a mille the thousandth part of a dollar, and that all accounts in public offices and all proceedings in the courts of the United States shall be kept and had in conformity to this regulation.

ACT OF FEBRUARY 9, 1793.[1] — An act regulating foreign coins, making them a legal tender, and establishing their value, etc.

[1. Statutes at Large, p. 300.]

SEC. 1. *Be it enacted, etc.*, That from and after the first day of July next, foreign gold and silver coins shall pass current as money within the United

[1] The subsequent legislation upon this subject is as follows:

Act of February 1, 1798 — Suspends section 2 of above act, and continues for

States, and be a legal tender for the payment of all debts and demands, at the several and respective rates following, and not otherwise, viz: The gold coins of Great Britain and Portugal, of their present standard, at the rate of one hundred cents for every twenty-seven grains of the actual weight thereof; the gold coins of France, Spain and the dominions of Spain, of their present standard, at the rate of one hundred cents for every twenty-seven grains and

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three years from January 1, 1798, and and until the end of the next session of Congress thereafter, the legal tender quality of foreign gold and silver coins at the same rates as per section 1 of the act of February 9, 1793.

Act of April 30, 1802 — Further suspends section 2 of the act of February 9, 1793. Foreign coins continued as legal tender for three years.

Act of April 10, 1806 — Foreign gold and silver coins to be current and a legal tender in the United States for three years at same rates as by act of February 9, 1793.

Act of April 29, 1816 — Restores legal tender character of foreign coins for three years, at the following rates: Gold coins of Great Britain and Portugal, 100 cents for every 27 grains, or 88 8-9 cents per pennyweight; gold coins of France, 100 cents for every 27½ grains, or 87¼ cents per pennyweight; gold coins of Spain, 100 cents for every 28½ grains, or 84 cents per pennyweight; silver crowns of France, 117.6 cents per ounce, or 110 cents for each crown weighing 18 pennyweights 17 grains; 5-franc pieces, 116 cents per ounce, or 93.3 cents for each 5-franc piece weighing 16 pennyweights 2 grains.

Act of March 3, 1819 — Continues in force the legal tender value in the United States of foreign gold coins at the rates of April 29, 1816, until November 1, 1819; "and from and after that day foreign gold coins shall cease to be a tender in the United States for the payment of debts or demands." Part of act of April 29, 1816, relating to silver coins, continued in force until April 29, 1821.

Act of March 3, 1821 — Crown and 5-franc piece of France continued as legal tender until April 29, 1823.

Act of March 3, 1823 — Continues for four years longer the legal tender character of crowns and 5-franc pieces of France.

Act of March 3, 1823 — Gold coins of Great Britain, Portugal, France, and Spain to be received in payment of lands bought from the United States at the rates given in the act of April 29, 1816, but not made legal tender.

Act of June 25, 1834 — Certain silver coins to be of the legal value and to pass by tale, the dollars of Mexico, Peru, Chili, and Central America, of not less weight than 415 grains, and restamped dollars of Brazil of like weight, fineness, not less than 10 ounces 15 pennyweights of pure silver in Troy pound of 12 ounces of standard silver, at 100 cents each; the 5-franc piece of France, weighing not less than 384 grains, at 93 cents.

Act of June 28, 1834 — Regulates the legal tender value of certain gold coins, as follows: Great Britain, Portugal, and Brazil, of not less than 22 carats fine, at 94.8 cents per pennyweight; those of France, $\frac{9}{10}$ fine, 93.1 cents per pennyweight, and those of Spain, Mexico, and Columbia, of 20 carats, 3 7-16 grains fine, at 89.9 cents per pennyweight.

Act of March 3, 1843 — Foreign gold coins to pass current "and be receivable, by weight, for the payment of all debts and demands" at the following rates: Those of Great Britain, not less than .915½ fine, 94.6 cents per pennyweight; those of France, of not less than .899 fine, at 92.9 cents per pennyweight.

Silver coins at the following rates: Spanish pillar dollars and dollars of Mexico, Peru, Bolivia, not less than .897 fine and 415 grains in weight, at 100 cents each; 5-franc pieces of France, not less than .900 fine and 384 grains in weight, at 93 cents each.

Act of February 21, 1857 — Spanish and Mexican coins, known as the quarter, eighth, and sixteenth of the Spanish pillar dollar, and Mexican dollar, to be received by the United States, as follows: ¼ of a dollar, or 2 reals, at 20 cents; ⅛ of a dollar, or 1 real, at 10 cents; 1-16 of a dollar, or ½ real, at 5 cents. Said coins to be recoined when received. Former acts, making foreign coins a legal tender, repealed; assays of foreign coins to be made by the Director of the Mint and annually reported.

two fifths of a grain, of the actual weight thereof. Spanish milled dollars, at the rate of one hundred cents for each dollar, the actual weight whereof shall not be less than seventeen pennyweights and seven grains; and in proportion for the parts of a dollar. Crowns of France, at the rate of one hundred and ten cents for each crown, the actual weight whereof shall not be less than eighteen pennyweight and seventeen grains, and in proportion for the parts of a crown. But no foreign coin that may have been, or shall be issued subsequent to the first day of January, 1792, shall be a tender, as aforesaid, until samples thereof shall have been found, by assay, at the mint of the United States, to be conformable to the respective standards required, and proclamation thereof shall have been made by the President of the United States.

SEC. 2. *Provided always, and be it further enacted*, That at the expiration of three years next ensuing the time when the coinage of gold and silver, agreeably to the act, entitled "An act establishing a mint, and regulating the coins of the United States," shall commence at the mint of the United States (which time shall be announced by the proclamation of the President of the United States), all foreign gold coins, and all foreign silver coins, except Spanish milled dollars and parts of such dollars, shall cease to be a legal tender, as aforesaid.

SEC. 3. *And be it further enacted*, That all foreign gold and silver coins, (except Spanish milled dollars, and parts of such dollars), which shall be received in payment for monies due to the United States, after the said time, when the coining of gold and silver coins shall begin at the mint of the United States, shall, previously to their being issued in circulation, be coined anew, in conformity to the act, entitled "An act establishing a mint and regulating the coins of the United States."

[SEC. 4. Provides that from and after July 1, 1793, foreign gold and silver coins shall be received for dues and fees at rates therein established.]

[SEC. 5. Fixes the time for making annual assays.]

ACT OF JUNE 28, 1834.—An act concerning gold coins of the United States and for other purposes.

[4 Statutes at Large, p. 699.]

Be it enacted, etc., That the gold coins of the United States shall contain the following quantities of metal, that is to say: each eagle shall contain two hundred and thirty-two grains of pure gold, and two hundred and fifty-eight grains of standard gold; each half eagle one hundred and sixteen grains of pure gold, and one hundred and twenty-nine grains of standard gold; each quarter eagle shall contain fifty-eight grains of pure gold, and sixty-four and a half grains of standard gold; every such eagle shall be of the value of ten dollars; every such half eagle shall be of the value of five dollars; and every such quarter eagle shall be of the value of two dollars and fifty cents; and the said gold coins shall be receivable in all payments, when of full weight, according to their respective values; and when of less than full weight, at less values, proportioned to their respective actual weights.

SEC. 2. *And be it further enacted*, That all standard gold or silver deposited for coinage after the thirty-first of July next, shall be paid for in coin under the direction of the Secretary of the Treasury, within five days from the making of such deposit, deducting from the amount of said deposit of gold and silver one-half of one per centum: *Provided*, That no deduction

shall be made unless said advance be required by such depositor within forty days.

SEC. 3. *And be it further enacted*, That all gold coins of the United States minted anterior to the thirty-first day of July next, shall be receivable in all payments at the rate of ninety-four and eight-tenths of a cent per pennyweight.

[SEC. 4. Directs the setting apart of gold coins for assay and makes provision for securing accuracy in fineness and weight.]

SEC. 5. *And be it further enacted*, That this act shall be in force from and after the 31st of July, 1834.

ACT OF JANUARY 18, 1837. — An act supplementary to the act entitled "An act establishing a mint and regulating the coins of the United States."

[5 Statutes at Large, p. 136.]

[SECS. 1–7, inclusive, relate to the organization of the mint, duties of officers, bonds, salaries, etc.]

SEC. 8. *And be it further enacted*, That the standard for both gold and silver coins of the United States shall hereafter be such, that of one thousand parts by weight, nine hundred shall be of pure metal and one hundred of alloy; and the alloy of the silver coins shall be of copper; and the alloy of the gold coins shall be of copper and silver, provided that the silver do not exceed one-half of the whole alloy.

SEC. 9. *And be it further enacted*, That of the silver coins, the dollar shall be of the weight of four hundred and twelve and one-half grains; the half dollar of the weight of two hundred and six and one-fourth grains; the quarter dollar of the weight of one hundred and three and one-eighth grains; the dime, or tenth part of a dollar, of the weight of forty-one and a quarter grains; and the half dime, or twentieth part of a dollar, of the weight of twenty grains and five-eighths of a grain. And that dollars, half dollars, and quarter dollars, dimes and half dimes, shall be legal tenders of payment, according to their nominal value, for any sums whatever.

SEC. 10. *And be it further enacted*, That of the gold coins, the weight of the eagle shall be two hundred and fifty-eight grains; that of the half eagle one hundred and twenty-nine grains; and that of the quarter eagle sixty-four and one-half grains. And that for all sums whatever, the eagle shall be a legal tender of payment for ten dollars; the half eagle for five dollars; and the quarter eagle for two and a half dollars.

SEC. 11. *And be it further enacted*, That the silver coins heretofore issued at the mint of the United States, and the gold coins issued since the 31st day of July 1834, shall continue to be legal tenders of payment for their nominal values, on the same terms as if they were of the coinage provided for by this act.

SEC. 12. *And be it further enacted*, That of the copper coins, the weight of the cent shall be one hundred and sixty-eight grains, and the weight of the half cent eighty-four grains. And the cent shall be considered of the value of one-hundredth part of a dollar, and the half cent of the value of one two-hundredth part of a dollar.

[SEC. 13. Provides for the devices upon coins.]

SEC. 14. *And be it further enacted*, That gold and silver bullion brought to the mint for coinage, shall be received and coined, by the proper officers, for the benefit of the depositor: *Provided*, that it shall be lawful to refuse, at

the mint, any deposits of less value than one hundred dollars, and any bullion so base as to be unsuitable for the operations of the mint; *And provided also*, That when gold and silver are combined, if either of these metals be in such small proportion that it cannot be separated advantageously, no allowance shall be made to the depositor for the value of such metal.

[SECS. 15–38. Relate to the technique of coinage, the organization of the mint, the deposit of bullion and payment therefor. No charge for coinage is to be made, except for expense of reducing bullion to standard.]

ACT OF MARCH 3, 1849. — Authorizing the coinage of gold dollars and double eagles.

[9 Statutes at Large, p. 397.]

Be it enacted, etc., That there shall be, from time to time, struck and coined at the mint of the United States, and the branches thereof, conformably in all respects to law (except that on the reverse of the gold dollar the figure of the eagle shall be omitted), and conformably in all respects to the standard for gold coins now established by law, coins of gold of the following denominations and values, viz.: double eagles, each to be of the value of twenty dollars, or units, and gold dollars, each to be of the value of one dollar, or unit.

SEC. 2. *And be it further enacted*, That for all sums whatever, the double eagle shall be a legal tender for twenty dollars, and the gold dollar shall be a legal tender for one dollar.

[SEC. 3. Extends existing law on coinage and counterfeiting to coins herein authorized.]

[SEC. 4. Provides a limit of tolerance in weight for gold coins.]

ACT OF MARCH 3, 1851. [Provisions in regard to coinage, etc., contained in an act to reduce and modify the rates of postage in the United States, and for other purposes.]

[9 Statutes at Large, p. 587,]

[SEC. 11. Provides for the coinage of a three-cent piece weighing twelve and three-eighths grains, three-fourths silver and one-fourth copper — "a legal tender in payment of debts for all sums of thirty cents and under." This was the first silver coin authorized to contain an amount of silver less than the amount proportionate to the silver dollar.][1]

ACT OF FEBRUARY 21, 1853. — An act amendatory of existing laws relative to the half dollar, quarter dollar, dime, and half dime.

[10 Statutes at Large p. 160.]

Be it enacted, etc., That from and after the first day of June, 1852 [1853],[1] the weight of the half dollar, or piece of fifty cents, shall be one hundred and ninety-two grains, and the quarter dollar, dime, and half dime, shall be,

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[1] By Sec. 7 of an Act of March 3, 1853, the weight and fineness of the three-cent piece were made proportional to those of the other subsidiary coins.

[1] By Sec. 7 of an act of March 3, 1853, this act was made to take effect on April 1, 1853.

respectively, one-half, one-fifth, and one-tenth of the weight of said half dollar.

SEC. 2. *And be it further enacted*, That the silver coins issued in conformity with the above section, shall be legal tenders in payment of debts for all sums not exceeding five dollars.

SEC. 3. *And be it further enacted*, That in order to procure bullion for the requisite coinage of the subdivisions of the dollar authorized by this act, the Treasurer of the Mint shall, with the approval of the Director, purchase such bullion with the bullion fund of the mint. He shall charge himself with the gain arising from the coinage of such bullion into coins of a nominal value exceeding the intrinsic value thereof, and shall be credited with the difference between such intrinsic value and the price paid for such bullion, and with the expense of distributing said coins as hereinafter provided. The balances to his credit, or the profit of said coinage, shall be, from time to time, on a warrant of the Director of the mint, transferred to the account of the Treasury of the United States.

SEC. 4. *And be it further enacted*, That such coins shall be paid out at the mint, in exchange for gold coins at par, in sums not less than one hundred dollars; and it shall be lawful, also, to transmit parcels of the same, from time to time, to the assistant treasurers, depositaries, and other officers of the United States, under general regulations, proposed by the Director of the Mint, and approved by the Secretary of the Treasury: *Provided, however*, That the amount coined into quarter dollars, dimes, and half dimes, shall be regulated by the Secretary of the Treasury.

SEC. 5. *And be it further enacted*, That no deposits for coinage into the half dollar, quarter dollar, dime, and half dime, shall hereafter be received, other than those made by the Treasurer of the Mint, as herein authorized, and upon the account of the United States.

[SEC. 6. Provides for the casting of gold or silver into bars or ingots, at a charge of ½ per cent. in addition to charge for refining or parting.[1] Same charge imposed upon the coinage of gold.]

[SEC. 7. Provides for the coinage of a three-dollar gold piece.]

ACT OF FEBRUARY 21, 1857.—An act relating to foreign coins, and for the coinage of cents at the mint of the United States.

[11 Statutes at Large, p. 163.]

SEC. 3. *And be it further enacted*, That all former acts authorizing the currency of foreign gold or silver coins, and declaring the same a legal tender in payment for debts, are hereby repealed; but it shall be the duty of the director of the mint to cause assays to be made, from time to time, of such foreign coins as may be known to our commerce, to determine their average weight, fineness, and value, and to embrace in his annual report a statement of the results thereof.

[SECS. 4, 5, 6. Relate to the coinage of a nickel one-cent piece weighing seventy-two grains, 88 per cent. copper and 12 per cent. nickel.][2]

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[1] By Sec. 7 of an Act of March 3, 1853, the charge for the casting of bars, ingots, or discs, was reduced to the actual cost of the operation.

[2] The act of April 22, 1864, substituted for this coin a bronze cent of forty-eight grains, composed of 95 per cent. copper and 5 per cent. of tin and zinc, and a two-cent piece of the same composition and of twice the weight. The cent was made a

ACT OF JULY 17, 1861.—An act to authorize a national loan, and for other purposes.

[12 Statutes at Large, p. 259.]

Be it enacted, etc. [Authorizes a loan of $250,000,000, in twenty-year bonds at 7 per cent. interest, or three-year treasury notes of denominations not less than $50, at 7.3 per cent. interest.] And the Secretary of the Treasury may also issue in exchange for coin, and as part of the above loan, or may pay for salaries or other dues from the United States, treasury notes of a less denomination than fifty dollars, not bearing interest, but payable on demand by the Assistant Treasurers of the United States at Philadelphia, New York, or Boston, or treasury notes bearing interest at the rate 3.65 per centum, payable in one year from date, and exchangeable at any time for treasury notes for fifty dollars and upwards, issuable under the authority of this act, and bearing interest as specified above: *Provided*, That no exchange of such notes in any less amount than one hundred dollars shall be made at any one time: *And provided further*, That no treasury notes shall be issued of a less denomination than ten dollars,[1] and that the whole amount of treasury notes, not bearing interest, issued under the authority of this act, shall not exceed $50,-000,000.

[SEC. 6 authorizes the reissue of the notes herein provided for, until December 31, 1862.]

[SEC. 7 authorizes the issue in exchange for coin or in payment of public dues, of not more than $20,000,000, 6 per cent. treasury notes payable within 12 months.]

ACT OF AUGUST 5, 1861.—An act supplementary to an act entitled "An act to authorize a national loan and for other purposes."

[12 Statutes at Large, p. 313.]

Be it enacted, etc. * * * any part of the treasury notes payable on demand, authorized by said act [of July 17, 1861], may be made payable by the assistant Treasurer at St. Louis, or by the depositary at Cincinnati.

SEC. 5. *And be it further enacted*, That the Treasury notes authorized by the act to which this is supplementary, of a less denomination than fifty dollars, payable on demand without interest, and not exceeding in amount the sum of $50,000,000, shall be receivable in payment of public dues.

ACT OF FEBRUARY 12, 1862.—An act to authorize an additional issue of United States notes.

[12 Statutes at Large, p. 338.]

Be it enacted, etc., That the Secretary of the Treasury, in addition to the $50,000,000 of notes payable on demand of denominations not less than five dollars, heretofore authorized by the acts of July 17, and August 5, 1861, be, and he is hereby, authorized to issue like notes, and for like purposes, to the amount of $10,000,000, and said notes shall be deemed part of the loan of $250,000,000 authorized by said acts.

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legal tender in any payment to the amount of ten cents, the two-cent piece to the amount of twenty cents. By the act of March 3, 1865, the legal tender quality of each of these coins was reduced to four cents.

[1] Changed to $5 by Act of August 5, 1861, Sec. 3.

ACT OF FEBRUARY 25, 1862.—An act to authorize the issue of United States notes, and for the redemption or funding thereof and for funding the floating debt of the United States.

[12 Statutes at Large, p. 345.]

Be it enacted, etc., That the Secretary of the Treasury is hereby authorized to issue, on the credit of the United States, $150,000,000 of United States notes, not bearing interest, payable to bearer, at the Treasury of the United States, and of such denominations as he may deem expedient, not less than five dollars each: *Provided, however*, That fifty millions of said notes shall be in lieu of the demand treasury notes authorized to be issued by the act of July 17, 1861; which said demand notes shall be taken up as rapidly as practicable, and the notes herein provided for substituted for them: *And provided further*, That the amount of the two kinds of notes together shall at no time exceed the sum of $150,000,000, and such notes herein authorized shall be receivable in payment of all taxes, internal duties, excises, debts, and demands of every kind due to the United States, except duties on imports, and of all claims and demands against the United States of every kind whatsoever, except for interest upon bonds and notes; which shall be paid in coin, and shall also be lawful money and a legal tender in payment of all debts, public and private, within the United States, except duties on imports and interest as aforesaid. And any holders of said United States notes depositing any sum not less than fifty dollars or some multiple of fifty dollars, with the Treasurer of the United States, or either of the Assistant Treasurers, shall receive in exchange therefor duplicate certificates of deposit, one of which may be transmitted to the Secretary of the Treasury, who shall thereupon issue to the holder an equal amount of bonds of the United States, coupon or registered, as may by said holder be desired, bearing interest at the rate of six per centum per annum, payable semi-annually, and redeemable at the pleasure of the United States after five years, and payable twenty years from the date thereof. And such United States notes shall be received the same as coin, at their par value, in payment for any loans that may be hereafter sold or negotiated by the Secretary of the Treasury, and may be reissued from time to time as the exigencies of the public interest shall require.

[SEC. 2 authorizes a loan of $500,000,000 in 6 per cent. 5-20 bonds to fund the Treasury notes and floating debt of the United States.]

SEC. 4. *And be it further enacted*, That the Secretary of the Treasury may receive from any person or persons, or any corporation, United States notes on deposit for not less than thirty days, in sums of not less than one hundred dollars, with any of the Assistant Treasurers or designated depositaries of the United States authorized by the Secretary of the Treasury to receive them, who shall issue therefor certificates of deposit made in such form as the Secretary of the Treasury shall prescribe, and said certificates of deposit shall bear interest at the rate of five per centum per annum; and any amount of United States notes so deposited may be withdrawn from deposit at any time after ten days' notice on the return of said certificates: *Provided*, That the interest on all such deposits shall cease and determine at the pleasure of the Secretary of the Treasury: *And provided further*, That the aggregate of such deposit shall at no time exceed the amount of $25,000,000.[1]

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[1] See increase to $50,000,000 by Act of March 17, 1862, Sec. 2, and by Act of July 11, 1862, Sec. 3, to $100,000,000.

SEC. 5. *And be it further enacted*, That all duties on imported goods shall be paid in coin, or in notes payable on demand heretofore authorized to be issued and by law receivable in payment of public dues, and the coin so paid shall be set apart as a special fund, and shall be applied as follows:

First. To the payment in coin of the interest on the bonds and notes of the United States.

Second. To the purchase or payment of one per centum of the entire debt of the United States, to be made within each fiscal year after the first day of July, 1862, which is to be set apart as a sinking fund, and the interest of which shall in like manner be applied to the purchase or payment of the public debt as the Secretary of the Treasury shall from time to time direct.

Third. The residue thereof to be paid into the Treasury of the United States.

[SECS. 6 and 7 prohibit, and provide penalties for, all counterfeiting, forging, etc.]

ACT OF MARCH 17, 1862.—An act to authorize the purchase of coin, and for other purposes.

[12 Statutes at Large, p. 370.]

SEC 2. *And be it further enacted*, That the demand notes authorized by the act of July 17, 1861, and the act of February 12, 1862, shall, in addition to being receivable in payment of duties on imports, be receivable, and shall be lawful money and a legal tender, in like manner, and for the same purposes, and to the same extent, as the notes authorized by an act entitled "An act to authorize the issue of United States notes, and for the redemption or funding thereof, and for funding the floating debt of the United States," approved February 25, 1862.

SEC. 3. *And be it further enacted*, That the limitation upon temporary deposits of United States notes with any assistant treasurers or designated depositaries, authorized by the Secretary of the Treasury to receive such deposits at 5 per cent. interest to $25,000,000 shall be so far modified as to authorize the Secretary of the Treasury to receive such deposits to an amount not exceeding $50,000,000, and that the rates of interest shall be prescribed by the Secretary of the Treasury not exceeding the annual rate of 5 per centum.

ACT OF JULY 11, 1862.—An act to authorize an additional issue of United States notes, and for other purposes.

[12 Statutes at Large, p. 532.]

Be it enacted, etc., That the Secretary of the Treasury is hereby authorized to issue, in addition to the amounts heretofore authorized, on the credit of the United States, $150,000,000 of United States notes, not bearing interest, payable to bearer at the treasury of the United States, and of such denominations as he may deem expedient: *Provided*, that no note shall be issued for the fractional part of a dollar, and not more than $35,000,000 shall be of lower denominations than five dollars; and such notes shall be receivable in payment of all loans made to the United States, and of all taxes, internal duties, excises, debts, and demands of every kind due to the United States, except duties on imports and interest, and of all claims and demands against the United States, except for interest upon bonds, notes, and certificates of

debt or deposit; and shall also be lawful money and a legal tender in payment of all debts, public and private, within the United States, except duties on imports and interest, as aforesaid. And any holder of said United States notes depositing any sum not less than fifty dollars, or some multiple of fifty dollars, with the Treasurer of the United States or either of the assistant treasurers, shall receive in exchange therefor duplicate certificates of deposit, one of which may be transmitted to the Secretary of the Treasury, who shall thereupon issue to the holder an equal amount of bonds of the United States, coupon or registered, as may by said holder be desired, bearing interest at the rate of six per centum per annum, payable semi-annually, and redeemable at the pleasure of the United States after five years, and payable twenty years from the date thereof: *Provided, however,* that any notes issued under this act may be paid in coin, instead of being received in exchange for certificates of deposit as above specified, at the direction of the Secretary of the Treasury. And the Secretary of the Treasury may exchange for such notes, on such terms as he shall think most beneficial to the public interest, any bonds of the United States bearing six per centum interest, and redeemable after five and payable in twenty years, which have been or may be lawfully issued under the provisions of any existing act; may reissue the notes so received in exchange; may receive and cancel any notes heretofore lawfully issued under any act of Congress, and in lieu thereof, issue an equal amount in notes such as are authorized by this act; and, may purchase, at rates not exceeding that of the current market, and cost of purchase not exceeding one-eighth of one per centum, any bonds or certificates of debt of the United States as he may deem advisable.

[SEC. 2 relates to the printing and engraving of United States notes.]

SEC. 3. *And be it further enacted,* That the limitation upon temporary deposits of United States notes with any assistant treasurer, or designated depositary authorized by the Secretary of the Treasury to receive such deposits, to $50,000,000 be, and is hereby, repealed; and the Secretary of the Treasury is authorized to receive such deposits, under such regulations as he may prescribe, to such amount as he may deem expedient, not exceeding $100,000,000, for not less than thirty days, in sums not less than one hundred dollars, at a rate of interest not exceeding five per centum per annum; and any amount so deposited may be withdrawn from deposit, at any time after ten days' notice on the return of the certificate of deposit. And of the amount of United States notes authorized by this act, not less than $50,000,000 shall be reserved for the purpose of securing prompt payment of such deposits when demanded, and shall be issued and used only when, in the judgment of the Secretary of the Treasury, the same, or any part thereof may be needed for that purpose. And certificates of deposit and of indebtedness issued under this or former acts, may be received on the same terms as United States notes in payment for bonds redeemable after five and payable in twenty years.

SEC. 4. *And be it further enacted,* That the Secretary of the Treasury may, at any time until otherwise ordered by Congress, and under the restrictions imposed by the "Act to authorize a national loan, and for other purposes," borrow, on the credit of the United States, such part of the sum of $250,000,000 mentioned in said act as may not have been borrowed under the provisions of the same, within twelve months from the passage thereof.

[SEC. 5. Makes appropriations for detecting counterfeiting.]

SEC. 6. *And be it further enacted,* That all the provisions of the act entitled "An act to authorize the issue of United States notes, and for the

redemption or funding thereof, and for funding the floating debt of the United States," approved February 25, 1862, so far as the same can or may be applied to the provisions of this act, and not inconsistent therewith, shall apply to the notes hereby authorized to be issued.

ACT OF JULY 17, 1862.—An act to authorize payments in stamps, and to prohibit circulation of notes of less denomination than one dollar.

[12 Statutes at Large, p. 592.]

Be it enacted, etc., That the Secretary of the Treasury be, and he is hereby directed to furnish to the Assistant Treasurers, and such designated depositaries of the United States as may be by him selected, in such sums as he may deem expedient, the postage and other stamps of the United States to be exchanged by them, on application, for United States notes; and from and after the first day of August next, such stamps shall be receivable in payment of all dues to the United States less than $5, and shall be received in exchange for United States notes when presented to any Assistant Treasurer or any designated depositary selected as aforesaid, in sums not less than $5.

SEC. 2. *And be it further enacted*, That from and after the first day of August, 1862, no private corporation, banking association, firm, or individual, shall make, issue, circulate, or pay any note, check, memorandum, token, or other obligation, for a less sum than $1, intended to circulateas money, or to be received or used in lieu of lawful money of the United States; and every person so offending shall, on conviction thereof, in any district or circuit court of the United States, be punished by fine not exceeding $500, or by imprisonment not exceeding six months, or by both, at the option of the court.

JOINT RESOLUTION OF JANUARY 17, 1863.—Joint resolution to provide for the immediate payment of the Army and Navy of the United States.

[12 Statutes at Large, p. 822.]

Whereas it is deemed expedient to make immediate provision for the payment of the army and navy: therefore, *Be it resolved, etc.*, That the Secretary of the Treasury be, and he is hereby authorized, if required by the exigencies of the public service, to issue on the credit of the United States the sum of $100,000,000 of United States notes, in such form as he may deem expedient, not bearing interest, payable to bearer, on demand, and of such denominations, not less than one dollar, as he may prescribe, which notes so issued shall be lawful money and a legal tender, like the similar notes heretofore authorized in payment of all debts, public and private, within the United States, except for duties on imports and interest on the public debt; and the notes so issued shall be part of the amount provided for in any bill now pending for the issue of Treasury notes, or that may be passed hereafter.

ACT OF FEBRUARY 25, 1863.—An act to provide a national currency, secured by a pledge of the United States stocks, and to provide for the circulation and redemption thereof.

[12 Statutes at Large, p. 665.]

[NOTE.—This act was superseded by the act of June 3, 1864, the provisions of which were largely the same. The most important differences from the latter act were the following:]

SEC. 17. *And be it further enacted*, That the entire amount of circulating notes to be issued under this act shall not exceed $300,000,000. $150,000,000 of which sum shall be apportioned to associations in the States, in the District of Columbia, and in the Territories according to representative population, and the remainder shall be apportioned by the Secretary of the Treasury among associations formed in the several States, in the District of Columbia, and in the Territories, having due regard to the existing banking capital, resources, and business, of such States, District, and Territories.

SEC. 62. *And be it further enacted*, That any bank or banking association, authorized by any State law to engage in the business of banking, and duly organized under such State law, at the time of the passage of this act, and which shall be the holder and owner of United States bonds to the amount of fifty per centum of its capital stock, may transfer and deliver to the Treasurer of the United States such bonds, or any part thereof, in the manner provided by this act; and, upon making such transfer and delivery, such bank or banking association shall be entitled to receive from the Comptroller of the Currency, circulating notes, as herein provided, equal in amount to eighty per centum of the amount of the bonds so transferred and delivered.

SEC. 63. *And be it further enacted*, That upon the failure of any such State bank or banking association, to redeem any of its circulating notes issued under the provisions of the preceding section the Comptroller of the Currency shall, when satisfied that such default has been made, and within thirty days after notice of such default, proceed to declare the bonds transferred and delivered to the treasurer, forfeited to the United States, and the same shall thereupon be forfeited accordingly. And thereupon the circulating notes which have been issued by such bank or banking association, shall be redeemed and paid at the treasury of the United States in the same manner as other circulating notes issued under the provisions of this act are redeemed and paid.

SEC. 64. *And be it further enacted*, That the bonds forfeited, as provided in the last preceding section, may be canceled to an amount equal to the circulating notes redeemed and paid, or such bonds may be sold, under the direction of the Secretary of the Treasury, and after retaining out of the proceeds a sum sufficient to pay the whole amount of circulating notes for the redemption of which such bonds are held, the surplus, if any remains, shall be paid to the bank or banking association from which such bonds were received.

ACT OF MARCH 3, 1863.—An act to provide ways and means for the support of the Government.

[12 Statutes at Large, p. 709.]

SEC. 2. *And be it further enacted*, That the Secretary of the Treasury be, and he is hereby, authorized to issue, on the credit of the United States, $400,000,000 in treasury notes, payable at the pleasure of the United States, or at any such time or times, not exceeding three years from date, as may be found most beneficial to the public interests, and bearing interest at a rate not exceeding six per centum per annum, payable at periods expressed on the face of said treasury notes; and the interest on the said treasury notes and on certificates of indebtedness and deposit hereafter issued, shall be paid in lawful money. The treasury notes thus issued shall be of such denomination as the Secretary may direct, not less than ten dollars, and may be dis-

posed of on the best terms that can be obtained, or may be paid to any creditor of the United States willing to receive the same at par. And said treasury notes may be made a legal tender to the same extent as United States notes, for their face value, excluding interest; or they may be made exchangeable under regulations prescribed by the Secretary of the Treasury, by the holder thereof, at the Treasury in the City of Washington, or at the office of any assistant treasurer or depositary designated for that purpose, for United States notes equal in amount to the Treasury notes offered for exchange, together with the interest accrued and due thereon at the date of interest payment next preceding such exchange. And in lieu of any amount of said treasury notes thus exchanged, or redeemed or paid at maturity, the Secretary may issue an equal amount of other treasury notes; and the treasury notes so exchanged, redeemed, or paid, shall be cancelled and destroyed as the Secretary may direct. In order to secure certain and prompt exchanges of United States notes for treasury notes, when required, as above provided, the Secretary shall have power to issue United States notes to the amount of $150,000,000, which may be used if necessary for such exchanges; but no part of the United States notes authorized by this section shall be issued for or applied to any other purposes than said exchanges; and whenever any amount shall have been so issued and applied, the same shall be replaced as soon as practicable from the sales of treasury notes for United States notes.

SEC. 3. *And be it further enacted*, That the Secretary of the Treasury be, and he is hereby, authorized, if required by the exigencies of the public service for the payment of the army and navy, and other creditors of the Government, to issue on the credit of the United States the sum of $150,000,000 of United States notes, including the amount of such notes heretofore authorized by the joint resolution approved January 17, 1863, in such form as he may deem expedient, not bearing interest, payable to bearer, and of such denominations, not less than one dollar, as he may prescribe, which notes so issued shall be lawful money and a legal tender in payment of all debts, public or private within the United States, except for duties on imports and interest on the public debt; and any of the said notes, when returned to the treasury, may be reissued from time to time as the exigencies of the public service may require. And in lieu of any of said notes, or any other United States notes, returned to the Treasury, and cancelled or destroyed, there may be issued equal amounts of United States notes, such as are authorized by this act. And so much of the act to authorize the issue of United States notes, and for other purposes, approved February 25, 1862, and of the act to authorize an additional issue of United States notes, and for other purposes, approved July 11, 1862, as restricts the negotiation of bonds to market value, is hereby repealed. And the holders of United States notes, issued under and by virtue of said acts, shall present the same for the purpose of exchanging the same for bonds, as therein provided, on or before the first day of July, 1863, and thereafter the right so to exchange the same shall cease and determine.

SEC. 4. *And be it further enacted*, That in lieu of postage and revenue stamps for fractional currency, and of fractional notes, commonly called postal currency, issued or to be issued, the Secretary of the Treasury may issue fractional notes of like amounts in such forms as he may deem expedient, and may provide for the engraving, preparation, and issue thereof in the treasury department building. And all such notes issued shall be exchangeable by the assistant-treasurers and designated depositaries for United States notes, in sums not less than three dollars, and shall be receivable for postage

and revenue stamps, and also in payment of any dues to the United States less than five dollars, except duties on imports, and shall be redeemed on presentation at the treasury of the United States in such sums and under such regulations as the Secretary of the Treasury shall prescribe: *Provided*, That the whole amount of fractional currency issued, including postage and revenue stamps issued as currency, shall not exceed $50,000,000.

SEC. 5. *And be it further enacted*, That the Secretary of the Treasury is hereby authorized to receive deposits of gold coin and bullion with the Treasurer or any assistant-treasurer of the United States, in sums not less than twenty dollars, and to issue certificates therefor, in denominations of not less than twenty dollars each, corresponding with the denominations of the United States notes. The coin and bullion deposited for or representing the certificates of deposit shall be retained in the treasury for the payment of the same on demand. And certificates representing coin in the treasury may be issued in payment of interest on the public debt, which certificates, together with those issued for coin and bullion deposited, shall not at any time exceed twenty per centum beyond the amount of coin and bullion in the treasury; and the certificates for coin or bullion in the Treasury shall be received at par in payment for duties on imports.

SEC. 7. * * * All banks, associations, or corporations, and individuals issuing or reissuing notes or bills for circulation as currency after April 1, 1863, in sums representing any fractional part of a dollar, shall be subject to and pay a duty of *five* per centum each half year thereafter upon the amount of such fractional notes or bills so issued. * * * .

ACT OF JUNE 3, 1864.—An act to secure national currency, secured by a pledge of United States bonds, and to provide for the circulation and redemption thereof.

[13 Statutes at Large, p. 99.]

[NOTE.—This act is the basis of the Revised Statutes at pp. 521–531. Only such portions are given here as are affected by subsequent legislation prior to the Revised Statutes.

This Act repealed the Act of Feb. 25, 1863. Some of the principal points of difference between the two acts are the following:

The Act of 1863 made no provision for the redemption of the circulation by the banks of the principal cities, such as is contained in sections 31 and 32 of the Act of 1864; but simply required that every bank should redeem its circulation at its own counter, and that it should have for that and other purposes a reserve equal to twenty-five per cent of its circulation and deposits, of which reserve three-fifths might be deposited with associations in nine principal cities named in the act.

The prohibition of the issue of circulating notes of a less denomination than five dollars, took effect at once in the Act of 1863.

The Act of 1863 required a smaller minimum of capital for a new bank than the Act of 1864, required a smaller proportion to be paid in before beginning business, and allowed a longer time for the payment of the remainder.

The Act of 1864 makes more complete provision than that of 1863 for the conversion of State banks into national associations, permitting the retention of the former name of a bank after conversion, and in section 12 exempting the stockholders of such banks from personal liability under certain conditions, which were intended to meet the case of the Bank of Commerce in the city of New York.]

SEC. 21. *And be it further enacted*, That upon the transfer and delivery of bonds to the treasurer, as provided in the foregoing section, the associations making the same shall be entitled to receive from the comptroller of

the currency, circulating notes of different denominations, in blank, registered and countersigned as hereinafter provided, equal in amount to ninety per centum of the current market value of the United States bonds so transferred and delivered, but not exceeding ninety per centum of the amount of said bonds at the par value thereof, if bearing interest at a rate not less than five per centum per annum; and at no time shall the total amount of such notes, issued to any such association exceed the amount at such time actually paid in of its capital stock.[1]

SEC. 22. *And be it further enacted*, That the entire amount of notes for circulation to be issued under this act shall not exceed $300,000,000.[2] * * *

SEC. 34. *And be it further enacted*, That every association shall make to the comptroller of the currency, a report, according to the form which may be prescribed by him, verified by the oath or affirmation of the president or cashier of such association; which report shall exhibit in detail, and under appropriate heads, the resources and liabilities of the association before the commencement of business on the morning of the first Monday of the months of January, April, July, and October of each year.[3] * * * In addition to the quarterly reports required by this section, every association shall, on the first Tuesday of each month, make to the Comptroller of the Currency a statement, under the oath of the president or cashier, showing the condition of the association making such statement, on the morning of the day next preceding the date of such statement, in respect to the following items and particulars, to wit: average amount of loans and discounts, specie, and other lawful money belonging to the association, deposits, and circulation. And associations in other places than those cities named in the thirty-first section of this act shall also return the amount due them available for the redemption of their circulation.

ACT OF JUNE 30, 1864.—An act to provide ways and means for the support of the Government, and for other purposes.

[13 Statutes at Large, p. 218.]

SEC. 2. *And be it further enacted*, That the Secretary of the Treasury may issue on the credit of the United States, and in lieu of an equal amount of bonds authorized by the preceding section, and as a part of said loan, not exceeding $200,000,000, in Treasury notes of any denomination not less than ten dollars, payable at any time not exceeding three years from date, or, if thought more expedient, redeemable at any time after three years from date, and bearing interest not exceeding the rate of seven and three-tenths per centum, payable in lawful money at maturity, or, at the discretion of the Secretary, semi-annually. And the said treasury notes may be disposed of by the Secretary of the Treasury, on the best terms that can be obtained, for lawful money; and such of them as shall be made payable, principal and interest, at maturity, shall be a legal tender to the same extent as United States notes for their face value, excluding interest, and may be paid to any creditor of the United States at their face value, excluding interest, or to any creditor willing to receive them at par, including interest; and any treasury notes issued under the authority of this act may be made convertible, at the

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[1] See Act of March 3, 1865, p. 511, and Sec. 10 of the Act of July 12, 1882, p. 538.

[2] See Act of March 3, 1865, p. 511; Act of July 12, 1870, p. 515; and Act of January 14, 1875, repealing limitation, p. 531.

[3] See Act of March 3, 1869, p. 514.

discretion of the Secretary of the Treasury, into any bonds issued under the authority of this act. And the Secretary of the Treasury may redeem and cause to be cancelled and destroyed any treasury notes or United States notes heretofore issued under authority of previous acts of Congress, and substitute, in lieu thereof, an equal amount of treasury notes such as are authorized by this act, or of other United States notes: *Provided*, That the total amount of bonds and treasury notes authorized by the first and second sections of this act shall not exceed $400,000,000, in addition to the amounts heretofore issued; nor shall the total amount of United States notes, issued or to be issued, ever exceed $400,000,000, and such additional sum, not exceeding $50,000,000, as may be temporarily required for the redemption of temporary loan; nor shall any treasury note bearing interest, issued under this act, be a legal tender in payment or redemption of any notes issued by any bank, banking association, or banker, calculated or intended to circulate as money.

SEC. 4. *And be it further enacted*, That the Secretary of the Treasury may authorize the receipt, as a temporary loan, of United States notes or the notes of national banking associations on deposit for not less than thirty days, in sums of not less than $50, by any of the assistant treasurers of the United States, or depositories designated for that purpose, other than national banking associations, who shall issue certificates of deposit in such form as the Secretary of the Treasury shall prescribe, bearing interest not exceeding six per centum annually, and payable at any time after the term of deposit, and after ten days' subsequent notice, unless time and notice be waived by the Secretary of the Treasury; and the Secretary of the Treasury may increase the interest on deposits at less than six per centum to that rate, or, on ten days' notice to depositors, may diminish the rate of interest as the public interest may require; but the aggregate of such deposits shall not exceed $150,000,000; and the Secretary of the Treasury may issue, and shall hold in reserve for payment of such deposits, United States notes not exceeding $50,000,000, including the amount already applied in such payment; and the United States notes, so held in reserve, shall be used only when needed, in his judgment, for the prompt payment of such deposits on demand, and shall be withdrawn and placed again in reserve as the amount of deposits shall again increase.

SEC. 5. *And be it further enacted*, That the Secretary of the Treasury may issue notes of the fractions of a dollar as now used for currency, in such form, with such inscriptions, and with such safeguards against counterfeiting, as he may judge best,[1] and provide for the engraving and preparation, and for the issue of the same, as well as of all other notes and bonds, and other obligations, and shall make such regulations for the redemption of said fractional notes and other notes when mutilated or defaced, and for the receipt of said fractional notes in payment of debts to the United States, except for customs, in such sums, not over five dollars, as may appear to him expedient; and it is hereby declared that all laws and parts of laws applicable to the fractional notes engraved and issued as herein authorized, apply equally and with like force to all the fractional notes heretofore authorized, whether known as postage currency or otherwise, and to postage-stamps issued as currency; but the whole amount of all descriptions of notes or stamps less than one dollar issued as currency, shall not exceed $50,000,000.

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[1] By the act of Mar. 3, 1865, authorizing the coinage of three-cent pieces and for other purposes, the issue of fractional notes of less denomination than five cents was forbidden, and by the act of May 16, 1866, the issue of such notes of less denomination than ten cents was forbidden.

ACT OF MARCH 3, 1865.—An act to authorize the coinage of three-cent pieces, and for other purposes.

[13 Statutes at Large, p. 517.]

[Provides for the coinage of a three-cent piece, weighing thirty grains, of nickel and copper, not exceeding 25 per cent. nickel—"a legal tender in any one payment to the amount of 60 cents, and that no fractional notes to be issued under five cents."]

ACT OF MARCH 3, 1865.—An act to provide ways and means for the support of the Government.

[13 Statutes at Large, p. 468.]

* * * *Provided*, that the rate of interest on any such bonds or treasury notes, when payable in coin, shall not exceed six per centum per annum ; and when not payable in coin shall not exceed seven and three tenths per centum per annum ; and the rate and character of interest shall be expressed on all such bonds or treasury notes : * * * .

ACT OF MARCH 3, 1865.—An act to amend an act entitled "An Act to provide a national currency, secured by a pledge of United States bonds, and to provide for the circulation and redemption thereof."

[13 Statutes at Large, p. 498.]

* * * And the amount of said circulating notes to be furnished to each association shall be in proportion to its paid-up capital as follows, and no more : [1] To each association whose capital shall not exceed $500,000, ninety per centum of such capital ; to each association whose capital exceeds $500,000, but does not exceed $1,000,000, eighty per centum of such capital ; to each association whose capital exceeds $1,000,000, but does not exceed $3,000,000, seventy-five per centum of such capital ; to each association whose capital exceeds $3,000,000, sixty per cent. of such capital. And that $150,000,000 of the entire amount of circulating notes authorized to be issued shall be apportioned to associations in the states, in the District of Columbia, and in the territories, according to representative population, and the remainder shall be apportioned by the Secretary of the Treasury among associations formed in the several states, in the District of Columbia, and in the territories, having due regard to the existing banking capital, resources and business of such states, district, and territories.

ACT OF MARCH 3, 1865.—An act to amend an act entitled "An Act to provide internal revenue, to support the Government, to pay interest on the public debt, and for other purposes," approved June 10, 1864.

[13 Statutes at Large, p. 469.]

SEC. 6. *And be it further enacted*, That every national banking association, state bank or state banking association, shall pay a tax of ten per centum on the amount of notes of any state bank or state banking association, paid out by them after the first day of July, 1866.

[1] See Sec. 21 of Act of June 3, 1864, above, and Sec. 10 of the Act of July 12, 1882, p. 538.

SEC. 7. *And be it further enacted*, That any existing bank organized under the laws of any state, having a paid-up capital of not less than $75,000, which shall apply before the first day of July next for authority to become a national bank, under the act * * * approved June 3, 1864, and shall comply with all the requirements of said act, shall, if such bank be found by the Comptroller of the Currency to be in good standing and credit, receive such authority in preference to new associations applying for the same: * * * *

[Remainder of Section, referring to state banks having branches, same as Sec. 5155 of Rev. St., See p. 522.]

ACT OF APRIL 12, 1866.—An act to amend an act entitled "An act to provide ways and means to support the Government," approved March 3, 1865.

[14 Statutes at Large, p. 31.]

Be it enacted, etc., That the act entitled "An act to provide ways and means to support the Government," approved March 3, 1865, shall be extended and construed to authorize the Secretary of the Treasury, at his discretion, to receive any treasury notes or other obligations issued under any act of Congress, whether bearing interest or not, in exchange for any description of bonds authorized by the act to which this is an amendment; and also to dispose of any description of bonds authorized by said act, either in the United States or elsewhere, to such an amount, in such manner, and at such rates as he may think advisable, for lawful money of the United States, or for any treasury notes, certificates of indebtedness, or certificates of deposit, or other representatives of value, which have been or which may be issued under any act of Congress, the proceeds thereof to be used only for retiring treasury notes or other obligations issued under any act of Congress; but nothing herein contained shall be construed to authorize any increase of the public debt: *Provided*, That of United States notes not more than $10,000,000 may be retired and cancelled within six months from the passage of this act, and thereafter not more than $4,000,000 in any one month: *And provided further*, That the act to which this is an amendment shall continue in full force in all its provisions, except as modified by this act.

ACT OF MAY 16, 1866.—An act to authorize the coinage of five-cent pieces.

[14 Statutes at Large, p. 47.]

[Provides for the coinage of a nickel five-cent piece, weighing 77.16 grains, legal tender in any one payment to the amount of one dollar.[1] Redeemable in national currency when presented in sums of not less than $100. Prohibits the issue of fractional notes of less denomination than ten cents.[2]]

ACT OF JULY 13, 1866—to reduce internal taxation, etc.

[14 Statutes at Large, p. 98.]

SEC. 9. [bis] *And be it further enacted*, That Section six of the Act of March 3, 1865, * * * be amended by striking out all after the enacting clause, and inserting in lieu thereof the following: That every national banking

[1] See Sec. 3587 Rev. Statutes, p. 521.

[2] Sec. 3 of the act of March 3, 1865, prohibited the issue of fractional notes of less denomination than five cents.

association, State bank, or State banking association, shall pay a tax of ten per centum on the amount of notes of any person, State bank, or State banking association, used for circulation and paid out by them after the first day of August, 1866, and such tax shall be assessed and paid in such manner as shall be prescribed by the commission of internal revenue.

ACT OF MARCH 2, 1867.—An act to provide ways and means for the payment of compound-interest notes.[1]

[14 Statutes at Large, p. 558.]

Be it enacted, etc., That for the purpose of redeeming and retiring any compound-interest notes outstanding, the Secretary of the Treasury is hereby authorized and directed to issue temporary loan certificates in the manner prescribed by section four of the act entitled "An act to authorize the issue of United States notes and for the redemption or funding thereof, and for funding the floating debt of the United States," approved February 25, 1862, bearing interest at a rate not exceeding three per centum per annum, principal and interest payable in lawful money on demand; and said certificates of temporary loan may constitute and be held, by any national bank holding or owning the same, as a part of the reserve provided for in sections 31 and 32 of the act entitled "An act to provide a national currency secured by a pledge of United States bonds, and to provide for the circulation and redemption thereof," approved June 3, 1864: *Provided*, That not less than two fifths of the entire reserve of such bank shall consist of lawful money of the United States: *And provided further*, That the amount of such temporary certificates at any time outstanding shall not exceed $50,000,000.

ACT OF MARCH 26, 1867.—An act to exempt wrapping-paper made from wood or cornstalks from internal tax, and for other purposes.

[15 Statutes at Large, p. 6.]

SEC. 2. *And be it further enacted*, That every national banking association, state bank or banker, or association, shall pay a tax of ten per centum on the amount of notes of any town, city, or municipal corporation, paid out by them after the first day of May, A. D. 1867, to be collected in the mode and manner in which the tax on the notes of state banks is collected.

ACT OF FEBRUARY 4, 1868.—An act to suspend further reduction of the currency.

[15 Statues at Large, p. 34.]

Be it enacted, etc., That, from and after the passage of this act, the authority of the Secretary of the Treasury to make any reduction of the currency, by retiring or cancelling United States notes, shall be, and is hereby, suspended; but nothing herein contained shall prevent the cancellation and destruction of mutilated United States notes, and the replacing of the same with notes of the same character and amount.

[Became a law without the President's signature on February 4, 1868.]

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[1] See Act of July 25, 1868; also Act of July 12, 1870, p. 515, providing for the retirement of such loan certificates.

ACT OF JULY 25, 1868.—An act to provide for a further issue of temporary loan certificates, for the purpose of redeeming and retiring the remainder of the outstanding compound interest notes.

[15 Statutes at Large, p. 183.]

Be it enacted, etc., That for the sole purpose of redeeming and retiring the remainder of the compound-interest notes outstanding, the Secretary of the Treasury is hereby authorized and directed to issue an additional amount of temporary loan certificates, not exceeding $25,000,000; said certificates to bear interest at the rate of three per centum per annum, principal and interest payable in lawful money on demand, and to be similar in all respects to the certificates authorized by the act entitled "An act to provide ways and means for the payment of compound-interest notes," approved March 2, 1867; and the said certificates may constitute and be held by any national bank holding or owning the same as a part of the reserve, in accordance with the provisions of the above mentioned act of March 2, 1867.

ACT OF MARCH 3, 1869.—An act regulating the reports of national banking associations.

[15 Statutes at Large, p. 326.]

Be it enacted, etc., That in lieu of all reports required by section 34 of the national currency act, every association shall make to the Comptroller of the Currency, not less than five reports during each and every year, according to the form which may be prescribed by him, verified by the oath or affirmation of the president or cashier of such association, and attested by the signature of at least three of the directors; which report shall exhibit, in detail and under appropriate heads, the resources and liabilities of the associations at the close of business on any past day to be by him specified, * * *.

ACT OF MARCH 18, 1869.—An act to strengthen the public credit.

[16 Statutes at Large, p. 1.]

Be it enacted, etc., That in order to remove any doubt as to the purpose of the government to discharge all just obligations to the public creditors, and to settle conflicting questions and interpretations of the laws by virtue of which such obligations have been contracted, it is hereby provided and declared that the faith of the United States is solemnly pledged to the payment in coin or its equivalent of all the obligations of the United States not bearing interest, known as United States notes, and of all the interest-bearing obligations of the United States, except in cases where the law authorizing the issue of any such obligation has expressly provided that the same may be paid in lawful money or other currency than gold and silver. But none of said interest-bearing obligations not already due shall be redeemed or paid before maturity unless at such time United States notes shall be convertible into coin at the option of the holder, or unless at such time bonds of the United States bearing a lower rate of interest than the bonds to be redeemed can be sold at par in coin. And the United States also solemnly pledges its faith to make provision at the earliest practicable period for the redemption of the United States notes in coin.

ACT OF JULY 12, 1870.—An act to provide for the redemption of the three per cent. temporary loan certificates and for an increase of national bank notes.

[16 Statutes at Large, p. 251.]

Be it enacted, etc., That $54,000,000 in notes for circulation may be issued to national banking associations, in addition to the $300,000,000 authorized by the 22d section of the "Act to provide a national currency, secured by a pledge of United States bonds, and to provide for the circulation and redemption thereof," approved June 3, 1864; and the amount of notes so provided shall be furnished to banking associations organized, or to be organized, in those states and territories having less than their proportion under the apportionment contemplated by the provisions of the "Act to amend an act to provide a national currency, secured by a pledge of United States bonds, and to provide for the circulation and redemption thereof," approved March 3, 1865; and the bonds deposited with the Treasurer of the United States, to secure the additional circulating notes herein authorized, shall be of any description of bonds of the United States, bearing interest in coin, but a new apportionment of the increased circulation herein provided for shall be made as soon as practicable, based upon the census of 1870: *Provided*, That if applications for the circulation herein authorized shall not be made within one year after the passage of this act by banking associations organized, or to be organized, in States having less than their proportion, it shall be lawful for the Comptroller of the Currency to issue such circulation to banking associations applying for the same in other States or Territories having less than their proportion, giving the preference to such as have the greatest deficiency:[1] *And provided further*, That no banking association hereafter organized shall have a circulation in excess of $500,000.[2]

SEC. 2. *And be it further enacted*, That at the end of each month after the passage of this act, it shall be the duty of the Comptroller of the Currency to report to the Secretary of the Treasury the amount of circulating notes issued, under the provisions of the preceding section, to national banking associations during the previous month; whereupon the Secretary of the Treasury shall redeem and cancel an amount of the three per centum temporary loan certificates issued under the acts of March 2, 1867, and July 25, 1868, not less than the amount of circulating notes so reported, and may, if necessary, in order to procure the presentation of such temporary loan certificates for redemption, give notice to the holders thereof, by publication or otherwise, that certain of said certificates (which shall be designated by number, date, and amount) shall cease to bear interest from and after a day to be designated in such notice, and that the certificates so designated shall no longer be available as any portion of the lawful money-reserve in possession of any national banking association, and after the day designated in such notice no interest shall be paid on such certificates, and they shall not thereafter be counted as a part of the reserve of any banking association.

ACT OF MARCH 3, 1871.—An act to provide for the redemption of copper and other token coins.

[16 Statutes at Large, p. 580.]

Be it enacted, etc., That the Secretary of the Treasury is hereby authorized

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[1] All these regulations for the distribution of bank currency were repealed by the act of January 14, 1875; see page 531.

[2] Repealed by Act of July 12, 1882, Sec. 10, p. 538.

and required to redeem in lawful money, under such rules and regulations as he may from time to time prescribe, all copper, bronze, copper-nickel, and base-metal coinage of every kind heretofore authorized by law, when presented in sums of not less than $20 ; and whenever under this authority these coins are presented for redemption in such quantity as to show the amount outstanding to be redundant, the Secretary of the Treasury is authorized to discontinue or diminish the manufacture and issue of such coinage until otherwise ordered by him.

ACT OF FEBRUARY 12, 1873.* — An act revising and amending the laws relative to the mints, Assay-offices, and coinage of the United States.

[17 Statutes at Large, p. 424.]

* NOTE — The act of February 12, 1873, is largely a revision of earlier coinage laws, and contains 76 sections. As it is included in the revision of 1874; only a few portions are reproduced here.

Be it enacted, etc. * * * * * *

SEC. 14. That the gold coins of the United States shall be a one-dollar, piece, which, at the standard weight of twenty-five and eight-tenths grains, shall be the unit of value ; a quarter-eagle, or two-and-a-half-dollar piece ; a three-dollar piece ; a half-eagle, or five-dollar piece ; an eagle, or ten-dollar piece ; and a double eagle, or twenty-dollar piece. And the standard weight of the gold dollar shall be twenty-five and eight-tenths grains ; of the quarter-eagle, or two-and-a-half-dollar piece, sixty-four and a half grains ; of the three-dollar piece, seventy-seven and four-tenths grains ; of the half-eagle, or five-dollar piece, one hundred and twenty-nine grains ; of the eagle, or ten-dollar piece, two hundred and fifty-eight grains ; of the double-eagle, or twenty-dollar piece, five hundred and sixteen grains ; which coins shall be a legal tender in all payments at their nominal value when not below the standard weight and limit of tolerance provided in this act for the single piece, and, when reduced in weight, below said standard and tolerance, shall be a legal tender at valuation in proportion to their actual weight ; and any gold coin of the United States, if reduced in weight by natural abrasion not more than one-half of one per centum below the standard weight prescribed by law, after a circulation of twenty years, as shown by its date of coinage, and at a ratable proportion for any period less than twenty years, shall be received at their nominal value by the United States treasury and its offices, under such regulations as the Secretary of the Treasury may prescribe for the protection of the Government against fraudulent abrasion or other practices ; and any gold coins in the treasury of the United States reduced in weight below this limit of abrasion shall be recoined.

SEC. 15. That the silver coins of the United States shall be a trade-dollar, a half-dollar, or fifty-cent piece, a quarter-dollar, or twenty-five-cent piece, a dime, or ten-cent piece ; and the weight of the trade dollar shall be four hundred and twenty grains troy ; the weight of the half-dollar shall be twelve grammes and one-half of a gramme ; the quarter-dollar and the dime shall be, respectively, one-half and one-fifth of the weight of said half-dollar ; and said coins shall be a legal tender at their nominal value for any amount not exceeding five dollars in any one payment.[1]

[1] See Secs. 3513, 3586, Revised Statutes, pp. 518, 521.

REVISED STATUTES OF THE UNITED STATES.

[Bold face references in parentheses indicate the immediate source of the legislation in question. The date 1873, alone, refers to the Act of February 12, 1873; 1864, alone, to the National Bank Act of June 3, 1864.]

SEC. 254. (**Mar. 3, 1863, § 5.**) The Secretary of the Treasury is authorized to receive deposits of gold coin and bullion with the Treasurer or any assistant treasurer of the United States, in sums not less than twenty dollars, and to issue certificates therefor, in denominations of not less than twenty dollars, each, corresponding with the denominations of the United States notes. The coin and bullion deposited for or representing the certificates of deposit shall be retained in the Treasury for the payment of the same on demand. And certificates representing coin in the Treasury may be issued in payment of interest on the public debt, which certificates, together with those issued for coin and bullion deposited, shall not at any time exceed twenty per centum beyond the amount of coin and bullion in the Treasury; and the certificates for coin and bullion in the Treasury shall be received at par in payment for duties on imports.

SEC. 324 (**1864, § 1.**) There shall be in the Department of the Treasury a Bureau charged with the execution of all laws passed by Congress relating to the issue and regulation of a national currency secured by United States bonds; the chief officer of which Bureau shall be called the Comptroller of the Currency, and shall perform his duties under the general direction of the Secretary of the Treasury.

SEC. 3412. (**Mar. 3, 1865, § 6; July 13, 1866, § 9.**) Every national banking association, State bank, or State banking association, shall pay a tax of ten per centum on the amount of notes of any person, or of any State bank or State banking association, used for circulation and paid out by them.

SEC. 3413. (**Mar. 26, 1867, § 2.**) Every national banking association, State bank, or banker, or association, shall pay a tax of ten per centum on the amount of notes of any town, city, or municipal corporation, paid out by them.[1]

SEC. 3414. (**Mar. 3, 1865.**) A true and complete return of the monthly amount of circulation, of deposits, and of capital, as aforesaid, and of the monthly amount of notes of persons, town, city, or municipal corporation, State banks, or State banking associations paid out as aforesaid for the previous six months, shall be made and rendered in duplicate on the first day of December and the first day of June, by each of such banks, associations, corporations, companies, or persons, * * *.

SEC. 3473. All duties on imports shall be paid in gold and silver coin only, [coin certificates] or in demand Treasury notes, issued under the authority of the acts of July 17, 1861, chapter five; and February 12, 1862, chapter twenty; and all taxes and other debts and demands than duties on imports, accruing or becoming due to the United States, shall be paid in gold and silver coin, Treasury notes, United States notes, or notes of national banks;[2] * * *.

SEC. 3505. (**1873, § 14.**) Any gold coins of the United States, if reduced in weight by natural abrasion not more than one-half of one per centum below the standard weight prescribed by law, after a circulation of twenty

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[1] See act of February 8, 1875, p. 532.

[2] As amended by act of February 27, 1877.

years, as shown by the date of coinage, and at a ratable proportion for any period less than twenty years, shall be received at their nominal value by the United States Treasury and its offices, under such regulations as the Secretary of the Treasury may prescribe for the protection of the Government against fraudulent abrasion or other practices.

SEC. 3511. (1873, § 14.) The gold coins of the United States shall be a one-dollar piece, which, at the standard weight of twenty-five and eight-tenths grains, shall be the unit of value; the quarter-eagle, or two and a half dollar piece; a three-dollar piece; a half-eagle, or five-dollar piece; an eagle, or ten-dollar piece; and a double-eagle, or twenty-dollar piece. And the standard weight of the gold dollar shall be twenty-five and eight-tenths grains; of the quarter-eagle, or two and a half dollar piece, sixty-four and a half grains; of the three-dollar piece, seventy-seven and four-tenths grains; of the half-eagle, or five-dollar piece, one hundred and twenty-nine grains; of the eagle, or ten-dollar piece, two hundred and fifty-eight grains; of the double-eagle, or twenty-dollar piece, five hundred and sixteen grains.[1]

SEC. 3512. (1873, § 14.) Any gold coins in the Treasury of the United States, when reduced in weight by natural abrasion more than one-half of one per centum below the standard weight prescribed by law, shall be recoined.

SEC. 3513.[2] (1873, § 15.) The silver coins of the United States shall be a trade-dollar, a half-dollar, or a fifty-cent piece, a quarter-dollar, or twenty-five-cent piece, a dime, or ten-cent piece; and the weight of the trade-dollar shall be four hundred and twenty grains troy; the weight of the half-dollar shall be twelve grams and one-half of a gram; the quarter-dollar and the dime shall be, respectively, one-half and one-fifth of the weight of said half-dollar.

SEC. 3514. (1873, § 13.) The standard for both gold and silver coins of the United States shall be such that of one thousand parts by weight nine hundred shall be of pure metal and one hundred of alloy. The alloy of the silver coins shall be of copper. The alloy of the gold coins shall be of copper, or of copper and silver; but the silver shall in no case exceed one-tenth of the whole alloy.

SEC. 3515. (1873, § 16.) The minor coins of the United States shall be a five-cent piece, a three-cent piece, and a one-cent piece. The alloy for the five and three-cent pieces shall be of copper and nickel, to be composed of three-fourths copper and one-fourth nickel. The alloy of the one-cent piece shall be ninety-five per centum of copper and five per centum of tin and zinc, in such proportions as shall be determined by the Director of the Mint. The weight of the piece of five cents shall be seventy-seven and sixteen-hundredths grains troy; of the three-cent piece, thirty grains; and of the one-cent piece, forty-eight grains.

SEC. 3516. (1873, § 17.) No coins, either of gold, silver, or minor coinage, shall hereafter be issued from the Mint other than those of the denominations, standards, and weights set forth in this Title.

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[1] Coinage of $1 and $3 pieces discontinued by Act of September 26, 1890, page 542.

[2] See also Act of March 3, 1875, for 20-ct. silver pieces; Act of February 28, 1878, restoring standard silver dollar to full legal tender and authorizing its coinage; Act July 14, 1890, discontinuing coinage of silver dollar. By an act of August 5, 1892, the coinage of 5,000,000 souvenir half dollars for the World's Columbian Exposition was authorized, and by an act of March 3, 1893 provision was made for the coinage of 40,000 souvenir quarter dollars for the Board of Lady Managers of the World's Columbian Exposition.

SEC. 3518. (1873, § 19). At the option of the owner gold or silver may be cast into bars of fine metal, or of standard fineness, or unparted, as he may prefer, with a stamp upon the same designating the weight and fineness, and with such devices impressed thereon as may be deemed expedient to preven fraudulent imitation, and no such bars shall be issued of a less weight than five ounces.[1]

SEC. 3519. (1873, § 20). Any owner of gold bullion may deposit the same at any mint, to be formed into coin or bars for his benefit. It shall be lawful, however, to refuse any deposit of less value than one hundred dollars, or any bullion so base as to be unsuitable for the operations of the Mint. In cases where gold and silver are combined, if either metal be in such small proportion that it cannot be separated advantageously, no allowance shall be made to the depositor for its value.

SEC. 3520. (1873, § 21). Any owner of silver buillion may deposit the same at any mint, to be formed into bars, or into dollars of the weight of four hundred and twenty grains troy, designated in this Title as trade-dollars, and no deposit of silver for other coinage shall be received. Silver bullion contained in gold deposits, and separated therefrom, may, however, be paid for n silver coin, at such valuations as may be, from time to time, established by the Director of the Mint.

SEC. 3524. (1873, § 25). The charge for converting standard gold bullion into coin shall be one-fifth of one per centum.[2] The charges for converting standard silver into trade-dollars for melting and refining when bullion is below standard, for toughening when metals are contained in it which render it unfit for coinage, for copper used for alloy when the bullion is above standard, for separating the gold and silver when these metals exist together in the bullion, and for the preparation of bars, shall be fixed, from time to time, by the Director, with the concurrence of the Secretary of the Treasury, so as to equal but not exceed, in their judgment, the actual average cost to each mint and assay-office of the material, labor, wastage, and use of machinery employed in each of the cases aforementioned.

Sec. 3527. (1873, § 28).[3] Silver coins other than the trade-dollar shall be paid out at the several mints, and at the assay-office in New York City, in exchange for gold coins at par, in sums not less than one hundred dollars. It shall be lawful, also, to transmit parcels of the same, from time to time, to the assistant treasurers, depositaries, and other officers of the United States, under general regulations proposed by the Director of the Mint, and approved by the Secretary of the Treasury. Nothing herein contained shall, however, prevent the payment of silver coins, at their nominal value, for silver parted from gold, as provided in this Title, or for change less than one dollar in settlement for gold deposits. But for two years after the 12th day of February, 1873, silver coins shall be paid at the Mint in Philadelphia, and the assay-office in New York City, for silver bullion purchased for coinage, under such regulations as may be prescribed by the Director of the Mint and approved by the Secretary of the Treasury.

SEC. 3563. (1792, § 20). The money of account of the United States shall be expressed in dollars or units, dimes or tenths, cents, or hundredths, and mills or thousandths, a dime being the tenth part of a dollar, a cent the hundredth part of a dollar, a mill the thousandth part of a dollar ; and all

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[1] See also Acts of May 26, 1882, and March 3, 1891.

[2] This charge repealed by Act of January 14, 1875, section 2.

[3] See acts August 7, 1882 ; August 4, 1886 ; March 2, 1889.

accounts in the public offices and all proceedings in the courts shall be kept and had in conformity to this regulation.

SEC. 3564. (**Mar.3, 1873, § 1**). The value of foreign coin as expressed in the money of account of the United States shall be that of the pure metal of such coin of standard value ; and the values of the standard coins in circulation of the various nations of the world shall be estimated annually by the Director of the Mint and be proclaimed on the first day of January by the Secretary of the Treasury.

SEC. 3565. (**Mar. 3, 1873, § 2**). In all payments by or to the Treasury, whether made here or in foreign countries, where it becomes necessary to compute the value of the sovereign or pound sterling, it shall be deemed equal to four dollars eighty-six cents and six and one-half mills, and the same rule shall be applied in appraising merchandise imported where the value is, by the invoice, in sovereigns or pounds sterling, and in the construction of contracts payable in sovereigns or pounds sterling ; and this valuation shall be the par of exchange between Great Britain and the United States ; and all contracts made after the first day of January, 1874, based on an assumed par of exchange with Great Britain of fifty-four pence to the dollar, or four dollars forty-four and four-ninths cents to the sovereign or pound sterling, shall be null and void.

SEC. 3571. United States notes shall be of such denominations not less than $1 as the Secretary of the Treasury may prescribe, shall not bear interest, shall be payable to bearer, and shall be in such form as the Secretary may deem best.

SEC. 3572. The whole amount of notes or stamps for the fractions of a dollar, issued as currency, shall not, at any time, exceed $50,000,000.

SEC. 3573. No issue of fractional notes of the United States shall be of a less denomination than ten cents ; and all issues of a less denomination shall, when paid into the Treasury or any designated depository of the United States, or redeemed or exchanged as now provided by law, be retained and canceled.

SEC. 3574. The notes of the fractional currency shall be in such form, with such inscriptions, and with such safeguards against counterfeiting, as the Secretary of the Treasury may deem best. They shall be exchangeable by the assistant treasurers and designated depositaries for United States notes in sums of not less than $3 ; and shall be receivable for postage and revenue stamps, and for all dues to the United States, except customs, in sums not over $5, and shall be redeemed on presentation at the Treasury of the United States in such sums and under such regulations as the Secretary of the Treasury shall prescribe.

SEC. 3575. The Secretary of the Treasury may provide for the engraving and preparation, and for the issue of fractional and other notes, and shall make such regulations for the redemption of such notes when mutilated or defaced, and for the receipt of fractional notes in payment of debts to the United States, except for customs, in such sums, not over $5, as may appear to him expedient.

SEC. 3579. When any United States notes are returned to the Treasury, they may be re-issued, from time to time, as the exigencies of the public interest may require.

SEC. 3582. The authority given to the Secretary of the Treasury to make any reduction of the currency, by retiring and canceling United States notes is suspended.

SEC. 3583. No person shall make, issue, circulate or pay out any note, check, memorandum, token or other obligation for a less sum than one dollar,

intended to circulate as money or to be received or used in lieu of lawful money of the United States; and every person so offending shall be fined not more than $500, or imprisoned not more than six months, or both, at the discretion of the court.

SEC. 3584. (**Feb. 21, 1857,** § 3). No foreign gold or silver coins shall be a legal tender in payment of debts.

SEC. 3585. (1873, § 14). The gold coins of the United States shall be a legal tender in all payments at their nominal value when not below the standard weight and limit of tolerance provided by law for the single piece, and, when reduced in weight below such standard and tolerance, shall be a legal tender at valuation in proportion to their actual weight.

SEC. 3586. (1873, § 15). The silver coins of the United States shall be a legal tender at their nominal value for any amount not exceeding $5 in any one payment.

SEC. 3587. (1874, § 16). The minor coins of the United States shall be a legal tender at their nominal value for any amount not exceding 25 cents in any one payment.

SEC. 3588. United States notes shall be lawful money, and a legal tender in payment of all debts, public and private, within the United States, except for duties on imports and interest on the public debt.

SEC. 3589. Demand Treasury notes authorized by the Act of July 17, 1861, chapter 5, and the Act of February 12, 1862, chapter 20, shall be lawful money and a legal tender in like manner as United States notes.

SEC. 3590. Treasury notes issued under the authority of the Acts of March 3, 1863, chapter 73, and June 30, 1864, chapter 172, shall be legal tender to the same extent as United States notes, for their face value, excluding interest: *Provided*, That Treasury notes issued under the act last named, shall not be a legal tender in payment or redemption of any notes issued by any bank, banking association, or banker, calculated and intended to circulate as money.

SEC. 3700. (**Mar.** 17, 1861 § 1). The Secretary of the Treasury may purchase coin with any of the bonds or notes of the United States, authorized by law, at such rates and upon such terms as he may deem most advantageous to the public interest.

SEC. 5133. (1864, § 5). Associations for carrying on the business of banking under this Title may be formed by any number of natural persons, not less in any case than five. * * *

SEC. 5136. (1864, § 8). [Such association] shall * * * have succession for the period of twenty years from its organization, unless it is sooner dissolved according to the provisions of its articles of association, or by the act of its shareholders owning two-thirds of its stock, or unless its franchise becomes forfeited by some violation of the law. * * *

SEC. 5138. (1864, § 7). No association shall be organized under this Title with a less capital than $100,000; except that banks with a capital of not less than $50,000, may, with the approval of the Secretary of the Treasury, be organized in any place, the population of which does not exceed 6,000 inhabitants. No association shall be organized in a city the population of which exceeds 50,000 persons with a less capital than $200,000.

SEC. 5140. (1864, § 14). At least fifty per centum of the capital stock of every association shall be paid in before it shall be authorized to commence business; and the remainder of the capital stock of such association shall be paid in installments of at least ten per centum each, on the whole amount of the capital, as frequently as one installment at the end of each succeeding

month from the time it shall be authorized by the Comptroller of the Currency to commence business ; and the payment of each installment shall be certified to the Comptroller, under oath, by the president or cashier of the association.

SEC. 5151. (1864, § 12). The shareholders of every national banking association shall be held individually responsible, equally and ratably, and not one for another, for all contracts, debts, and engagements of such association, to the extent of the amount of their stock therein, at the par value thereof, in addition to the amount invested in such shares ; except that shareholders of any banking association now existing under State laws, having not less than five millions of dollars of capital actually paid in, and a surplus of twenty per centum shall be kept undiminished, and be in addition to the surplus provided for in this Title ; and if at any time there is a deficiency in such surplus of twenty per centum, such association shall not pay any dividends to its shareholders until the deficiency is made good ; and in case of such deficiency the Comptroller of the Currency may compel the association to close its business and wind up its affairs under the provisions of Chapter four of this Title.

SEC. 5153. (1864, § 45). All national banking associations, designated for that purpose by the Secretary of the Treasury, shall be depositaries of public money, except receipts from customs, under such regulations as may be prescribed by the Secretary; and they may also be employed as financial agents of the Government ; and they shall perform all such reasonable duties, as depositaries of public moneys and financial agents of the Government, as may be required of them. The Secretary of the Treasury shall require the associations thus designated to give satisfactory security, by the deposit of United States bonds and otherwise, for the safe-keeping and prompt payment of the public money deposited with them, and for the faithful performance of their duties as financial agents of the Government. And every association so designated as receiver or depositary of the public money shall take and receive at par all of the national currency bills, by whatever association issued, which have been paid into the Government for internal revenue, or for loans or stocks.

SEC. 5154. (1864, § 44). Any bank incorporated by special law, or any banking institution organized under a general law of any State, may become a national association under this Title by the name prescribed in its organization certificate. * * * But no such association shall have a less capital than the amount prescribed for associations organized under this Title.

SEC. 5155. (**Mar. 3, 1865**, § 7). It shall be lawful for any bank or banking association, organized under State laws, and having branches, the capital being joint and assigned to and used by the mother-bank, and branches in definite proportions, to become a national banking association in conformity with existing laws, and to retain and keep in operation its branches, or such one or more of them as it may elect to retain ; the amount of the circulation redeemable at the mother-bank, and each branch, to be regulated by the amount of capital assigned to and used by each.

SEC. 5159. (1864, § 16). Every association, after having complied with the provisions of this Title, preliminary to the commencement of the banking business, and before it shall be authorized to commence banking business under this title, shall transfer and deliver to the Treasurer of the United States any United States registered bonds, bearing interest, to an amount not less than thirty thousand dollars and not less than one-third of the capital stock paid in. Such bonds shall be received by the Treasurer upon deposit, and shall

be by him safely kept in his office, until they shall be otherwise disposed of, in pursuance of the provisions of this Title.

SEC. 5160. (1864, § 16). The deposit of bonds made by each association shall be increased as its capital shall be paid up or increased, so that every association shall at all times have on deposit with the Treasurer registered United States bonds to the amount of at least one-third of its capital stock actually paid in.[1] And any association that may desire to reduce its capital or close up its business and dissolve its organization, may take up its bonds upon returning to the Comptroller its circulating notes in the proportion hereinafter required, or may take up any excess of bonds beyond one-third of its capital stock, and upon which no circulating notes have been delivered.

SEC. 5167 (1864, § 26.) The bonds transferred to and deposited with the Treasurer of the United States, by any association, for the security of its circulating notes, shall be held exclusively for that purpose, until such notes are redeemed, except as provided in this Title. The Comptroller of the Currency shall give to any such association powers of attorney to receive and appropriate to its own use the interest on the bonds which it has so transferred to the Treasurer; but such powers shall become inoperative whenever such association fails to redeem its circulating notes. Whenever the market or cash value of any bonds thus deposited with the Treasurer is reduced below the amount of the circulation issued for the same, the Comptroller may demand and receive the amount of such depreciation in other United States bonds at cash value, or in money, from the association, to be deposited with the Treasurer as long as such depreciation continues. And the Comptroller, upon the terms prescribed by the Secretary of the Treasury, may permit an exchange to be made of any of the bonds deposited with the Treasurer by any association for other bonds of the United States authorized to be received as security for circulating notes, if he is of opinion that such an exchange can be made without prejudice to the United States; and he may direct the return of any bonds to the association which transferred the same, in sums of not less than one thousand dollars, upon the surrender to him and the cancellation of a proportionate amount of such circulating notes[2]: *Provided*, That the remaining bonds, which shall have been transferred by the association offering to surrender circulating notes are equal to the amount required for the circulating notes not surrendered by such association, and that the amount of bonds in the hands of the Treasurer is not diminished below the amount required to be kept on deposit with him, and that there has been no failure by the association to redeem its circulating notes, nor any other violation by it of the provisions of this Title, and that the market or cash value of the remaining bonds is not below the amount required for the circulation issued for the same.

SEC. 5171[3] (1864, § 21.) Upon a deposit of bonds as prescribed by sections 5159 and 5160 the association making the same shall be entitled to receive from the Comptroller of the Currency circulating notes of different denominations, in blank, registered and countersigned as hereinafter provided equal in amount to ninety per centum of the current market-value of the United States bonds so transferred and delivered, but not exceeding ninety per centum of

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[1] See Act of June 20, 1874, section 4, p. 530; and Act of July 12, 1882, section 8, p. 537.

[2] See Act of June 20, 1874, section 4, page 537, requiring the deposit of not less then $9,000.

[3] See Act of July 12, 1882, section 10, page 538.

the amount of the bonds at the par value thereof, if bearing interest at a rate not less than five per centum per annum: *Provided*,[1] **(March 3, 1865)** That the amount of circulating notes to be furnished to each association shall be in proportion to its paid-up capital as follows and no more:

First. To each association whose capital does not exceed $500,000, ninety per centum of such capital.

Second.[4] To each association whose capital exceeds $500,000 but does not exceed $1,000,000, eighty per centum of such capital.

Third.[4] To each association whose capital exceeds $1,000,000, but does not exceed $3,000,000, seventy-five per centum of such capital.

Fourth.[2] To each association whose capital exceeds $3,000,000, sixty per centum of such capital.

SEC. 5172. **(1864, § 22.)** In order to furnish suitable notes for circulation, the Comptroller of the Currency shall, under the direction of the Secretary of the Treasury, cause plates and dies to be engraved, in the best manner to guard against counterfeiting and fraudulent alterations, and shall have printed therefrom,[3] and numbered, such quantity of circulating notes, in blank, of the denominations of one dollar, two dollars, three dollars, five dollars, ten dollars, twenty dollars, fifty dollars, one hundred dollars, five hundred dollars and one thousand dollars, as may be required to supply the associations entitled to receive the same. Such notes shall express upon their face that they are secured by United States bonds, deposited with the Treasurer of the United States, by the written or engraved signatures of the Treasurer and Register, and by the imprint of the seal of the Treasury; and shall also express upon their face the promise of the association receiving the same to pay on demand, attested by the signatures of the President or Vice-President and cashier; and shall bear such devices and such other statements, and shall be in such form, as the Secretary of the Treasury shall, by regulation, direct.

SEC. 5173. **(1864, §41.)** The plates and special dies to be procured by the Comptroller of the Currency for the printing of such circulating notes shall remain under his control and direction, and the expenses necessarily incurred in executing the laws respecting the procuring of such notes, and all other expenses of the Bureau of the Currency, shall be paid out of the proceeds of the taxes or duties assessed and collected on the circulation of National banking associations under this Title.[4]

SEC. 5175. **(1864, § 22.)** Not more than one-sixth part of the notes furnished to any association shall be of a less denomination than five dollars. After specie payments are resumed no association shall be furnished with notes of a less denomination than five dollars.

SEC. 5176. **(July 12, 1870.)** No banking association organized subsequent to the 12th day of July, 1870, shall have a circulation in excess of $500,000.[5]

SEC. 5177. **(1864, § 22, July 12, 1870.)** The aggregate amount of circulating notes issued under the act of February 25, 1863, and under the act of

[1] This proviso replaces the following in the Act of June 3, 1864: "And at no time shall the total amount of such notes, issued to any such association, exceed the amount at such time actually paid in of its capital stock."

[2] Repealed by Section 10, act July 12, 1882, page 538.

[3] See Act of March 3, 1875, for authority to use distinctive paper.

[4] See Section 3, Act of June 20, 1874, page 529; and Section 8, Act of July 12, 1882, page 537, charging expense of assorting and transporting notes to the respective associations.

[5] Repealed by Act of July 12, 1882, section 10, page 538.

June 3, 1864, and under section 1 of the act of July 12, 1870, and under this Title, shall not exceed $354,000,000.[1]

SEC. 5178.[2] (**March 3, 1865, and July 12, 1870.**) $150,000,000 of the entire amount of circulating notes authorized to be issued shall be apportioned to associations in the States, in the Territories, and in the District of Columbia, according to representative population. $150,000,000 shall be apportioned by the Secretary of the Treasury among associations formed in the several States, in the Territories, and in the District of Columbia, having due regard to the existing banking capital, resources, and business of such States, Territories, and District. The remaining $54,000,000 shall be apportioned among associations in States and Territories having, under the apportionments above prescribed, less than their full proportion of the aggregate amount of notes authorized, which made due application for circulating notes prior to the 12th day of July, 1870. Any remainder of such $54,000,000 shall be issued to banking associations applying for circulating notes in other States or Territories having less than their proportion.

SEC. 5179.[3] (**July 12, 1870, § 6.**) In order to secure a more equitable distribution of the national banking currency, there may be issued circulating notes to banking associations organized in States and Territories having less than their proportion, and the amount of circulation herein authorized shall, under the direction of the Secretary of the Treasury, as it may be required for this purpose, be withdrawn, as herein provided, from banking associations organized in States having more than their proportion, but the amount so withdrawn shall not exceed $25,000,000 : *Provided*, That no circulation shall be withdrawn under the provisions of this section until after the $54,000,000 granted in the first section of the Act of July 12th, 1870, shall have been taken up.

SEC. 5182. (**1864, § 23.**) After any association receiving circulating notes under this Title has caused its promise to pay such notes on demand to be signed by the president or vice-president and cashier thereof, in such manner as to make them obligatory promissory notes, payable on demand, at its place of business, such association may issue and circulate the same as money. And the same shall be received at par in all parts of the United States in payment of taxes, excises, public lands, and all other dues to the United States, except duties on imports; and also for all salaries and other debts and demands owing by the United States to individuals, corporations, and associations within the United States, except interest on the public debt, and in redemption of the national currency.

SEC. 5183. (**1864, § 23.**) No national banking association shall issue [post notes or][4] any other notes to circulate as money than such as are authorized by the provisions of this Title.

SEC. 5184. (**1864, § 24.**) It shall be the duty of the Comptroller of the Currency to receive worn-out or mutilated circulating notes issued by any banking association, and also, on due proof of the destruction of any such circulating notes, to deliver in place thereof to the association other blank circulating notes to an equal amount. Such worn-out or mutilated notes, after a memorandum has been entered in the proper books, in accordance with such regulations as may be established by the Comptroller, as well as all circulating notes which shall have been paid or surrendered to be can-

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[1] This limitation was repealed by Section 3, Act of January 14, 1875, page 531.

[2] Superseded by Act of January 14, 1875, Section 3, p. 531.

[3] Repealed by Act of June 20, 1874, Section 7, p 530.

[4] The words in brackets were inserted by the act of February 18, 1875.

celed, shall be burned to ashes [1] in the presence of four persons, one to be appointed by the Secretary of the Treasury, one by the Comptroller of the Currency, one by the Treasurer of the United States, and one by the association, under such regulations as the Secretary of the Treasury may prescribe. A certificate of such burning, signed by the parties so appointed, shall be made in the books of the Comptroller, and a duplicate thereof forwarded to the association whose notes are thus canceled.

SEC. 5185. **(July 12, 1870, § 3.)** Associations may be organized in the manner prescribed by this Title for the purpose of issuing notes payable in gold [2]; and upon the deposit of any United States bonds bearing interest payable in gold with the Treasurer of the United States, in the manner prescribed for other associations, it shall be lawful for the Comptroller of the Currency to issue to the association making the deposit circulating notes of different denominations, but none of them of less than $5, and not exceeding in amount eighty per centum of the par value of the bonds deposited, which shall express the promise of the association to pay them, upon presentation at the office at which they are issued, in gold coin of the United States, and shall be so redeemable. But no such association shall have a circulation of more than $1,000,000.[3]

SEC. 5186. **(July 12, 1870, §§ 4, 5.)** Every association organized under the preceding section shall at all times keep on hand not less than twenty-five per centum of its outstanding circulation, in gold or silver coin of the United States; and shall receive at par in the payment of debts the gold-notes of every other such association which at the time of such payment is redeeming its circulating notes in gold coin of the United States, and shall be subject to all the provisions of this Title: *Provided*, That, in applying the same to associations organized for issuing gold-notes, the terms "lawful money" and "lawful money of the United States" shall be construed to mean gold or silver coin of the United States; and the circulation of such association shall not be within the limitation of circulation mentioned in this Title.

SEC. 5190. **(1874, § 8.)** The usual business of each national banking association shall be transacted at an office or banking-house located in the place specified in its organization certificate.

SEC. 5191. **(1864, § 31.)** Every national banking association in either of the following cities: Albany, Baltimore, Boston, Cincinnati, Chicago, Cleveland, Detroit, Louisville, Milwaukee, New Orleans, New York, Philadelphia, Pittsburgh, Saint Louis, San Francisco, and Washington,[4] shall at all times have on hand, in lawful money of the United States, an amount equal to at least twenty-five per centum of the aggregate amount of its notes in circulation and its deposits; and every other association shall at all times have on hand, in lawful money of the United States, an amount equal to at least fifteen per centum of the aggregate amount of its notes in circulation,[5] and of its deposits. Whenever the lawful money of any association in any of the cities named shall be below the amount of twenty-five per centum of its circulation and deposits, and whenever the lawful money of any other association shall be below fifteen per centum of its circulation and deposits, such association shall not increase its liabilities by making any new loans or discounts otherwise than by discounting or purchasing bills of exchange payable at sight, nor

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[1] Maceration substituted for burning by Act of June 23, 1874.

[2] See Act of Feb. 14, 1880, p. 536.

[3] This limitation was repealed by Act of Jan. 19, 1875, p. 532.

[4] Leavenworth was also included from 1864 to March 1, 1872.

[5] See Act of June 20, 1874, Section 2, p. 529.

make any dividend of its profits until the required proportion, between the aggregate amount of its outstanding notes of circulation and deposits and its lawful money of the United States, has been restored. And the Comptroller of the Currency may notify any association, whose lawful-money reserve shall be below the amount above required to be kept on hand, to make good such reserve; and if such association shall fail for thirty days thereafter so to make good its reserve of lawful money, the Comptroller may, with the concurrence of the Secretary of the Treasury, appoint a receiver to wind up the business of the association, as provided in section 5234.

SEC. 5192. (**1864, § 31.**) Three-fifths of the reserve of fifteen per centum required by the preceding section to be kept, may consist of balances due to an association, available for the redemption of its circulating notes,[1] from associations approved by the Comptroller of the Currency, organized under the act of June 3d, 1864, or under this Title, and doing business in the cities of Albany, Baltimore, Boston, Charleston, Chicago, Cincinnati, Cleveland, Detroit, Louisville, Milwaukee, New Orleans, New York, Philadelphia, Pittsburgh, Richmond, Saint Louis, San Francisco, and Washington. Clearing-house certificates, representing specie or lawful money specially deposited for the purpose, of any clearing-house association, shall also be deemed to be lawful money in the possession of any association belonging to such clearing-house, holding and owning such certificate, within the preceding section.

SEC. 5193. (**June 8, 1872, §§ 1, 2.**) The Secretary of the Treasury may receive United States notes on deposit, without interest, from any national banking association, in sums of not less than $10,000, and issue certificates therefor in such form as he may prescribe, in denominations of not less than $5,000, and payable on demand in United States notes at the place where the deposits were made. The notes so deposited shall not be counted as part of the lawful money reserve of the association; but the certificates issued therefor may be counted as part of its lawful-money reserve, and may be accepted in the settlement of clearing-house balances at the places where the deposits therefor were made.

SEC. 5194. (**June 8, 1872, § 3.**) The power conferred on the Secretary of the Treasury by the preceding section shall not be exercised so as to create any expansion or contraction of the currency. And United States notes, for which certificates are issued under that section, or other United States notes of like amount, shall be held as special deposits in the Treasury, and used only for the redemption of such certificates.

SEC. 5195. (**1864, § 32.**) Each association organized in any of the cities named in section 5191 shall select, subject to the approval of the Comptroller of the Currency, an association in the city of New York, at which it will redeem its circulating notes at par;[2] and may keep one-half of its lawful money reserve in cash deposits in the city of New York. But the foregoing provision shall not apply to associations organized and located in the city of San Francisco for the purpose of issuing notes payable in gold. Each association not organized within the cities named shall select, subject to the approval of the Comptroller, an association in either of the cities named, at which it will redeem its circulating notes at par. The Comptroller shall give public notice of the names of the associations selected, at which redemptions are to be made by the respective associations, and of any change that may be made of the association at which the notes of any association are redeemed. Whenever any association fails either to make the selection or to redeem its

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[1] See Act of June 20, 1874, Section 3, p. 529. [2] *Ibid.*

notes as aforesaid, the Comptroller of the Currency may, upon receiving satisfactory evidence thereof, appoint a receiver in the manner provided for in section 5234 to wind up its affairs. But this section shall not relieve any association from its liability to redeem its circulating notes at its own counter, at par, in lawful money on demand.

SEC. 5196. (**1864, § 32.**) Every national banking association formed or existing under this title, shall take and receive at par, for any debt or liability to it, any and all notes or bills issued by any lawfully organized national banking association. (**July 12, 1870, § 5.**) But this provision shall not apply to any association organized for the purpose of issuing notes payable in gold.

SEC. 5206. (**June 3, 1864.**) No association shall at any time pay out on loans or discounts, or in purchasing drafts or bills of exchange, or in payment of deposits, or in any other mode pay or put in circulation, the notes of any bank or banking association which are not, at any such time, receivable, at par, on deposit, and in payment of debts by the association so paying out or circulating such notes; nor shall any association knowingly pay out or put in circulation any notes issued by any bank or banking association which at the time of such paying out or putting in circulation is not redeeming its circulating notes in lawful money of the United States.

SEC. 5211. (**March 3, 1869.**) Every association shall make to the Comptroller of the Currency not less than five reports during each year, according to the form which may be prescribed by him. * * * Each such report shall exhibit, in detail and under appropriate heads, the resources and liabilities of the association at the close of business on any past day by him specified. * * * The Comptroller shall also have power to call for special reports from any particular association whenever in his judgment the same are necessary in order to a full and complete knowledge of its condition.

SEC. 5214. (**1864, § 41.**) In lieu of all existing taxes, every association shall pay to the Treasurer of the United States, in the months of January and July, a duty of one-half of one per centum each half-year upon the average amount of its notes in circulation, and a duty of one-quarter of one per centum each half-year upon the average amount of its deposits, and a duty of one-quarter of one per centum each half-year on the average amount of its capital stock, beyond the amount invested in United States bonds.

[SECS. 5215, 5216, 5217, provide for semi-annual returns of the amount of capital, circulation and deposits, with penalty for failure to make such returns; and for methods of assessing and collecting the tax.]

SEC. 5230. (**1864, §§ 47, 48.**) Whenever the Comptroller has become satisfied * * * that any association has refused to pay its circulating notes, he may, instead of canceling its bonds, cause so much of them as may be necessary to redeem its outstanding notes to be sold at public auction in the city of New York, after giving thirty days' notice of such sale to the association. For any deficiency in the proceeds of all the bonds of an association, when thus sold, to reimburse to the United States the amount expended in paying the circulating notes of the association, the United States shall have a paramount lien upon all its assets; and such deficiency shall be made good out of such assets in preference to any and all other claims whatsoever, except the necessary costs and expenses of administering the same.

SEC. 5240. (**1864, § 54.**) The Comptroller of the Currency, with the approval of the Secretary of the Treasury, shall, as often as shall be deemed necessary or proper, appoint a suitable person or persons to make an examination of the affairs of every banking association, who shall have power to make a thorough examination into all the affairs of the association. * * *

ACT OF JUNE 20, 1874 — An act fixing the amount of United States notes, providing for a redistribution of the national-bank currency, and for other purposes.

[18 Statutes at Large, p. 123.]

Be it enacted, etc., That the act entitled "An act to provide a national currency secured by a pledge of United States bonds, and to provide for the circulation and redemption thereof," approved June 3d, 1864, shall hereafter be known as "The national-bank act."

SEC. 2. That section 31 of "The national-bank act"[1] be so amended that the several associations therein provided for shall not hereafter be required to keep on hand any amount of money whatever, by reason of the amount of their respective circulations; but the moneys required by said section to be kept at all times on hand shall be determined by the amount of deposits in all respects, as provided for in the said section.

SEC. 3. That every association organized, or to be organized, under the provisions of the said act, and of the several acts amendatory thereof, shall at all times keep and have on deposit in the treasury of the United States, in lawful money of the United States, a sum equal to five per centum of its circulation, to be held and used for the redemption of such circulation; which sum shall be counted as part of its lawful reserve, as provided in section 2 of this act.[2] And when the circulating notes of any such associations, assorted or unassorted, shall be presented for redemption, in sums of $1,000 or any multiple thereof, to the Treasurer of the United States, the same shall be redeemed in United States notes. All notes so redeemed shall be charged by the Treasurer of the United States to the respective associations issuing the same, and he shall notify them severally, on the first day of each month, or oftener, at his discretion, of the amount of such redemptions; and whenever such redemptions for any association shall amount to the sum of $500, such association so notified shall forthwith deposit with the Treasurer of the United States a sum in United States notes equal to the amount of its circulating-notes so redeemed. And all notes of national banks worn, defaced, mutilated, or otherwise unfit for circulation, shall, when received by any assistant treasurer, or at any designated depository of the United States, be forwarded to the Treasurer of the United States for redemption as provided herein. And when such redemptions have been so re-imbursed, the circulating-notes so redeemed shall be forwarded to the respective associations by which they were issued; but if any of such notes are worn, mutilated, defaced, or rendered otherwise unfit for use, they shall be forwarded to the Comptroller of the Currency and destroyed, and replaced as now provided by law: *Provided,* That each of said associations shall re-imburse to the Treasury the charges for transportation,[3] and the costs for assorting such notes; and the associations hereafter organized shall also severally re-imburse to the Treasury the cost of engraving such plates as shall be ordered by each association respectively; and the amount assessed upon each association shall be in proportion to the circulation redeemed, and be charged to the fund on deposit with the Treasurer: *And provided further,* That so much of section 32 of said national-bank act requiring or permitting the redemption of its circulating notes elsewhere than at its own counter except as is provided for in this section, is hereby repealed.

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[1] See Sec. 5191, p. 526.

[2] See also Act of July 14, 1890, Sec. 6. p. 541.

[3] See Act of July 12, 1882, Sec. 8, p. 537.

SEC. 4. That any association organized under this act, or any of the acts of which this is an amendment, desiring to withdraw its circulating notes,[1] in whole or in part, may, upon the deposit of lawful money with the Treasurer of the United States in sums of not less than $9,000, take up the bonds which said association has on deposit with the Treasurer for the security of such circulating-notes, which bonds shall be assigned to the bank in the manner specified in the nineteenth section of the national-bank act; and the outstanding notes of said association, to an amount equal to the legal-tender notes deposited, shall be redeemed at the Treasury of the United States, and destroyed as now provided by law: *Provided*, That the amount of the bonds on deposit for circulation shall not be reduced below $50,000.

SEC. 5. That the Comptroller of the Currency shall, under such rules and regulations as the Secretary of the Treasury may prescribe, cause the charter-numbers of the associations to be printed upon all national-bank notes which may be hereafter issued by him.

SEC. 6. That the amount of United States notes outstanding and to be used as a part of the circulating-medium shall not exceed the sum of $382,000,000, which said sum shall appear in each monthly statement of the public debt, and no part thereof shall be held or used as a reserve.

SEC. 7. That so much of the act entitled "An act to provide for the redemption of the three per centum temporary loan certificates, and for an increase of national-bank notes," as provides that no circulation shall be withdrawn under the provisions of section 6 of said act, until after the $54,000,000 granted in section 1 of said act shall have been taken up, is hereby repealed; and it shall be the duty of the Comptroller of the Currency, under the direction of the Secretary of the Treasury, to proceed forthwith, and he is hereby authorized and required, from time to time, as applications shall be duly made therefor, and until the full amount of $55,000,000 shall be withdrawn, to make requisitions upon each of the national banks described in said section, and in the manner therein provided, organized in States having an excess of circulation, to withdraw and return so much of their circulation as by said act may be apportioned to be withdrawn from them, or, in lieu thereof, to deposit in the Treasury of the United States lawful money sufficient to redeem such circulation, and upon the return of the circulation required, or the deposit of lawful money, as herein provided, a proportionate amount of the bonds held to secure the circulation of such association as shall make such return or deposit shall be surrendered to it.

SEC. 8. That upon the failure of the national banks upon which requisition for circulation shall be made, or any of them, to return the amount required, or to deposit in the Treasury lawful money to redeem the circulation required, within thirty days, the Comptroller of the Currency shall at once sell, as provided in section 49 of the national-currency act, approved June 3, 1864, bonds held to secure the redemption of the circulation of the association or associations which shall so fail, to an amount sufficient to redeem the circulation required of such association or associations, and with the proceeds, which shall be deposited in the Treasury of the United States, so much of the circulation of such association or associations shall be redeemed as will equal the amount required and not returned and if there be any excess of proceeds over the amount required for such redemption, it shall be returned to the association or associations whose bonds shall have been sold. And it shall be the duty of the Treasurer, assistant treasurers, designated deposita-

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[1] See Sec. 5167, p. 523; also Act of July 12, 1882, Sec. 9. pp. 537–538.

ries, and national bank depositaries of the United States, who shall be kept informed by the Comptroller of the Currency of such associations as shall fail to return circulation as required, to assort and return to the Treasury for redemption the notes of such associations as shall come into their hands until the amount required shall be redeemed, and in like manner to assort and return to the Treasury, for redemption, the notes of such national banks as have failed, or gone into voluntary liquidation for the purpose of winding up their affairs, and of such as shall hereafter so fail or go into liquidation.

SEC. 9. That from and after the passage of this act it shall be lawful for the Comptroller of the Currency, and he is hereby required, to issue circulating-notes, without delay, as applications therefor are made, not to exceed the sum of $55,000,000, to associations organized, or to be organized, in those States and Territories having less than their proportion of circulation, under an apportionment made on the basis of population and of wealth, as shown by the returns of the census of 1870; and every association hereafter organized shall be subject to, and be governed by, the rules, restrictions, and limitations, and possess the rights, privileges, and franchises, now or hereafter to be prescribed by law as to national banking associations, with the same power to amend, alter, and repeal provided by "the national-bank act": *Provided*, That the whole amount of circulation withdrawn and redeemed from banks transacting business shall not exceed $55,000,000, and that such circulation shall be withdrawn and redeemed as it shall be necessary to supply the circulation previously issued to the banks in those States having less than their apportionment: *And provided further*, That not more than $30,000,000 shall be withdrawn and redeemed as herein contemplated during the fiscal year ending June 30, 1875.[1]

ACT OF JANUARY 14, 1875,—An act to provide for the resumption of specie payments.

[18 Statutes at Large, p. 296.]

Be it enacted, etc., That the Secretary of the Treasury is hereby authorized and required, as rapidly as practicable, to cause to be coined, at the mints of the United States, silver coins of the denominations of ten, twenty-five, and fifty cents, of standard value, and to issue them in redemption of an equal number and amount of fractional currency of similar denominations, or, at his discretion, he may issue such silver coins through the mints, the subtreasuries, public depositaries, and post-offices of the United States; and, upon such issue, he is hereby authorized and required to redeem an equal amount of such fractional currency, until the whole amount of such fractional currency outstanding shall be redeemed.

SEC. 2. That so much of section 3524 of the Revised Statutes of the United States as provides for a charge of one-fifth of one per centum for converting standard gold bullion into coin is hereby repealed; and hereafter no charge shall be made for that service.

SEC. 3. That section 5177 of the Revised Statutes of the United States, limiting the aggregate amount of circulating-notes of national-banking associations be, and is hereby repealed; and each existing banking-association may increase its circulating-notes in accordance with existing law without respect to said aggregate limit; and new banking-associations may be organized in

[1] Superseded by the Act of January 14, 1875.

accordance with existing law without respect to said aggregate limit; and the provisions of law for the withdrawal and redistribution of national-bank currency among the several States and Territories are hereby repealed. And whenever, and so often, as circulating-notes shall be issued to any such banking-association, so increasing its capital or circulating-notes, or so newly organized as aforesaid, it shall be the duty of the Secretary of the Treasury to redeem the legal-tender United States notes in excess only of $300,000,000, to the amount of eighty per centum of the sum of national-bank notes so issued to any such banking-association as aforesaid and to continue such redemption as such circulating notes are issued until there shall be outstanding the sum of $300,000,000 of such legal-tender United States notes,[1] and no more. And on and after the first day of January, anno Domini, eighteen hundred and seventy-nine, the Secretary of the Treasury shall redeem, in coin, the United States legal-tender notes then outstanding, on their presentation for redemption, at the office of the assistant treasurer of the United States in the city of New York,[2] in sums not less than fifty dollars. And to enable the Secretary of the Treasury to prepare and provide for the redemption in this act authorized or required, he is authorized to use any surplus revenues, from time to time, in the Treasury not otherwise appropriated, and to issue, sell, and dispose of, at not less than par, in coin, either of the descriptions of bonds of the United States described in the act of Congress approved July 14, 1870, entitled "An act to authorize the refunding of the national debt," with like qualities, privileges, and exemptions, to the extent necessary to carry this act into full effect, and to use the proceeds thereof for the purposes aforesaid. And all provisions of law inconsistent with the provisions of this act are hereby repealed.

ACT OF JANUARY 19, 1875.—An act to remove the limitation restricting the circulation of banking-associations issuing notes payable in gold.

[18 Statutes at Large, p. 302.]

Be it enacted, etc., That so much of section 5185 of the Revised Statutes of the United States as limits the circulation of banking-associations, organized for the purpose of issuing notes payable in gold, severally to $1,000,000, be, and the same is hereby, repealed; and each of such existing banking-associations may increase its circulating notes, and new banking-associations may be organized, in accordance with existing law, without respect to such limitation.

ACT OF FEBRUARY 8, 1875.—An act to amend existing customs and internal-revenue laws, and for other purposes.

[18 Statutes at Large, p. 307.]

SEC. 19.[3] That every person, firm, association other than national bank associations, and every corporation, State bank, or State banking association, shall pay a tax of ten per centum on the amount of their own notes used for circulation and paid out by them.

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[1] Subsequent Act of May 31, 1878, forbade further retirement of legal-tender notes, and fixed the limit at amount then outstanding, $346,681,016.

[2] San Francisco added by Section 3 of act of March 3, 1887. See page 540.

[3] See Secs. 3412, 3413, page 517.

SEC. 20. That every such person, firm, association, corporation, State bank, or State banking association, and also every national banking association, shall pay a like tax of ten per centum on the amount of notes of any person, firm, association other than a national banking association, or of any corporation, State bank, or State banking association, or of any town, city, or municipal corporation, used for circulation and paid out by them.

SEC. 21. That the amount of such circulating notes, and of the tax due thereon, shall be returned, and the tax paid at the same time, and in the same manner, and with like penalties for failure to return and pay the same, as provided by law for the return and payment of taxes on deposits, capital, and circulation, imposed by the existing provisions of internal revenue law.

ACT OF MARCH 3, 1875.—An act authorizing the coinage of a twenty-cent piece[1] of silver at the mints of the United States.

[18 Statutes at Large, p. 478.]

[Provides for the issue of a silver coin of the denomination of 20 cents weight 5 grams, legal tender for an amount not exceeding $5 in any one pay ment.]

ACT OF APRIL 17, 1876.—An act to provide for a deficiency in the Printing and Engraving Bureau of the Treasury Department, and for the issue of silver coin of the United States in place of fractional currency.

[19 Statutes at Large, p. 33.]

SEC. 2. That the Secretary of the Treasury is hereby directed to issue silver coins of the United States of the denomination of ten, twenty, twenty-five and fifty cents of standard value, in redemption of an equal amount of fractional currency, whether the same be now in the Treasury awaiting redemption, or whenever it may be presented for redemption;[2] and the Secretary of the Treasury may, under regulations of the Treasury Department, provide for such redemption and issue by substitution at the regular sub-treasuries and public depositories of the United States until the whole amount of fractional currency outstanding shall be redeemed. And the fractional currency redeemed under this act shall be held to be a part of the sinking-fund provided for by existing law, the interest to be computed thereon, as in the case of bonds redeemed under the act relating to the sinking-fund.

JOINT RESOLUTION OF JULY 22, 1876.—Joint resolution for the issue of silver coin.

[19 Statutes at Large, p. 33.]

Resolved, etc. That the Secretary of the Treasury, under such limits and regulations as will best secure a just and fair distribution of the same through the country, may issue the silver coin at any time in the Treasury to an amount not exceeding ten million dollars, in exchange for an equal amount of legal-tender notes; and the notes so received in exchange shall be kept

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[1] Coinage prohibited by act of May 2, 1878.

[2] See provisions of the Resumption Act of January 14, 1875, pp. 531–532.

as a special fund[1] separate and apart from all other money in the Treasury, and be reissued only upon the retirement and destruction of a like sum of fractional currency received at the Treasury in payment of dues to the United States; and said fractional currency, when so substituted, shall be destroyed and held as part of the sinking fund, as provided in the act approved April 17, 1876.

SEC. 2. That the trade dollar shall not hereafter be a legal tender, and the Secretary of the Treasury is hereby authorized to limit from time to time, the coinage thereof to such an amount as he may deem sufficient to meet the export demand for the same.

SEC. 3. That in addition to the amount of subsidiary silver coin authorized by law to be issued in redemption of the fractional currency it shall be lawful to manufacture at the several mints, and issue through the Treasury and its several offices, such coin to an amount, that, including the amount of subsidiary silver coin and of fractional currency outstanding, shall, in the aggregate, not exceed, at any time, $50,000,000.

SEC. 4. That the silver bullion required for the purposes of this resolution shall be purchased, from time to time, at market-rate, by the Secretary of the Treasury, with any money in the Treasury not otherwise appropriated; but no purchase of bullion shall be made under this resolution when the market-rate for the same shall be such as will not admit of the coinage and issue, as herein provided, without loss to the Treasury; and any gain or seigniorage arising from this coinage shall be accounted for and paid into the Treasury, as provided under existing laws relative to the subsidiary coinage: *Provided*, That the amount of money at any one time invested in such silver bullion, exclusive of such resulting coin, shall not exceed $200,000.

ACT OF FEBRUARY 28, 1878. — An act to authorize the coinage of the standard silver dollar and to restore its legal-tender character.

[20 Statutes at Large, p. 25.]

Be it enacted, etc., that there shall be coined, at the several mints of the United States, silver dollars of the weight of four hundred and twelve and a half grains Troy of standard silver, as provided in the act of January 18, 1837, on which shall be the devices and superscriptions provided by said act; which coins, together with all silver dollars heretofore coined by the United States, of like weight and fineness, shall be a legal tender at their nominal value, for all debts and dues public and private, except where otherwise expressly stipulated in the contract. And the Secretary of the Treasury is authorized and directed to purchase, from time to time, silver bullion, at the market price thereof, not less than two million dollars' worth per month, nor more than four million dollars' worth per month, and cause the same to be coined monthly, as fast as so purchased, into such dollars; and a sum sufficient to carry out the foregoing provision of this act is hereby appropriated out of any money in the Treasury not otherwise appropriated. And any gain

[1] Under Sec. 3 of the legislative, executive and judicial appropriations Act of June 21, 1879, the Secretary of the Treasury is directed to issue immediately, in payment of arrearages of pensions, the legal-tender notes held as a special fund under above authority, and it is further provided that "fractional currency presented for redemption shall be redeemed in any moneys in the Treasury not otherwise appropriated."

or seigniorage arising from this coinage shall be accounted for and paid into the Treasury, as provided under existing laws relative to the subsidiary coinage: *Provided*, That the amount of money at any one time invested in such silver bullion, exclusive of such resulting coin, shall not exceed $5,000,000: *And provided further*, That nothing in this act shall be construed to authorize the payment in silver of certificates of deposit issued under the provisions of section 254 of the Revised Statutes.

Sec. 2. That immediately after the passage of this act, the President shall invite the Governments of the countries composing the Latin Union, so-called, and of such other European nations as he may deem advisable, to join the United States in a conference to adopt a common ratio between gold and silver, for the purpose of establishing, internationally, the use of bi-metalic money, and securing fixity of relative value between those metals; such conferencc to be held at such place, in Europe or in the United States, at such time, within six months, as may be mutually agreed upon by the Executives of the Governments joining in the same, whenever the Governments so invited, or any three of them, shall have signified their willingness to unite in the same.

The President shall, by and with the advice and consent of the Senate, appoint three commissioners, who shall attend such conference on behalf of the United States, and shall report the doings thereof to the President, who shall transmit the same to Congress.

Said commissioners shall each receive the sum of two thousand five hundred dollars and their reasonable expenses, to be approved by the Secretary of State; and the amount necessary to pay such compensation and expenses is hereby appropriated out of any money in the Treasury not otherwise appropriated.

Sec. 3. That any holder of the coin authorized by this act may deposit the same with the Treasurer or any assistant treasurer of the United States, in sums not less than ten dollars, and receive therefor certificates of not less than ten dollars each, corresponding with the denominations of the United States notes. The coin deposited for or representing the certificates shall be retained in the Treasury for the payment of the same on demand. Said certificates shall be receivable for customs, taxes, and all public dues, and, when so received, may be re-issued.

Sec. 4. All acts and parts of acts inconsistent with the provisions of this act are hereby repealed.

[Vetoed by the President. Became a law on February 28, 1878, on passing each house by a two-thirds vote.]

ACT OF MAY 31, 1878. — An act to forbid the further retirement of United States legal-tender notes.

[20 Statutes at Large, p. 87.]

Be it enacted, etc., That from and after the passage of this act it shall not be lawful for the Secretary of the Treasury or other officer under him to cancel or retire any more of the United States legal-tender notes. And when any of said notes may be redeemed or be received into the Treasury under any law from any source whatever, and shall belong to the United States, they shall not be retired, cancelled, or destroyed, but they shall be reissued and paid out again and kept in circulation; *Provided*, That nothing herein shall prohibit the cancellation and destruction of mutilated notes and the

issue of other notes of like denomination in their stead, as now provided by law.

All acts and parts of acts in conflict herewith are hereby repealed.

ACT OF June 9, 1879. — **To provide for the exchange of subsidiary coins for lawful money of the United States under certain circumstances, and to make such coins a legal tender in all sums not exceeding ten dollars, and for other purposes.**

[21 Statutes at Large, p. 7.]

Be it enacted, etc,, That the holder of any of the silver coins of the United States of smaller denomination than one dollar, may, on presentation of the same in sums of twenty dollars, or any multiple thereof, at the office of the Treasurer or any assistant treasurer of the United States, receive therefor lawful money of the United States.

SEC. 2. The Treasurer or any assistant treasurer of the United States who may receive any coins under the provision of this act shall exchange the same in sums of twenty dollars, or any multiple thereof, for lawful money of the United States, on demand of any holder thereof.

SEC. 3. That the present silver coins of the United States of smaller denominations than one dollar shall hereafter be a legal tender in all sums not exceeding ten dollars in full payment of all dues public and private.

SEC. 4. That all laws or parts of laws in conflict with this act be, and the same are hereby, repealed.

ACT OF FEBRUARY 14, 1880. — **An act authorizing the conversion of national gold banks.**

[21 Statutes at Large, p. 66.]

Be it enacted etc., That any national gold bank organized under the provisions of the laws of the United States may, in the manner and subject to the provisions prescribed by section 5154 of the Revised Statutes of the United States, for the conversion of banks incorporated under the laws of any State, cease to be a gold bank and become such an association as is authorized by section 5133, for carrying on the business of banking, and shall have the same powers and privileges, and shall be subject to the same duties, responsibilities, and rules, in all respects, as are by law prescribed for such associations: *Provided*, That all certificates of organization which shall be issued under this act shall bear the date of the original organization of each bank respectively as a gold bank.

ACT OF JULY 12, 1882. — **To enable national banking associations to extend their corporate existence, and for other purposes.**

[22 Statutes at Large, p. 162.]

Be it enacted, etc., That any national baking association organized under the acts of February 25th, 1863, June 3d, 1864, and February 14th, 1880, or under sections 5133, 5134, 5135, 5136, and 5154 of the Revised Statutes of the United States, may, at any time within the two years next previous to the date of the expiration of its corporate existence under present law, and with the approval of the Comptroller of the Currency, to be granted, as hereinafter

provided, extend its period of succession by amending its articles of association for a term of not more than twenty years from the expiration of the period of succession named in said articles of association, and shall have succession for such extended period, unless sooner dissolved by the act of shareholders owning two-thirds of its stock, or unless its franchise becomes forfeited by some violation of law, or unless hereafter modified or repealed.

SEC. 6. That the circulating notes of any association so extending the period of its succession which shall have been issued to it prior to such extension shall be redeemed at the Treasury of the United States, as provided in section 3 of the act of June 20th, 1874, entitled "An act fixing the amount of United States notes, providing for redistribution of national-bank currency, and for other purposes," and such notes when redeemed shall be forwarded to the Comptroller of the Currency, and destroyed, as now provided by law; and at the end of three years from the date of the extension of the corporate existence of each bank the association so extended shall deposit lawful money with the Treasurer of the United States sufficient to redeem the remainder of the circulation which was outstanding at the date of its extension, as provided in sections 5222, 5224, and 5225 of the Revised Statutes: and any gain that may arise from the failure to present such circulating notes for redemption shall inure to the benefit of the United States; and from time to time, as such notes are redeemed or lawful money deposited therefor as provided herein, new circulating notes shall be issued as provided by this act, bearing such devices, to be approved by the Secretary of the Treasury, as shall make them readily distinguishable from the circulating notes heretofore issued: *Provided, however*, That each banking association which shall obtain the benefit of this act shall reimburse to the Treasury the cost of preparing the plate or plates for such new circulating notes as shall be issued to it.

SEC. 8. That national banks now organized or hereafter organized, having a capital of $150,000 or less, shall not be required to keep on deposit or deposit with the Treasurer of the United States bonds in excess of one-fourth of their capital stock as security for their circulating notes. but such banks shall keep on deposit or deposit with the Treasurer of the United States the amount of bonds as herein required. And such of those banks having on deposit bonds in excess of that amount are authorized to reduce their circulation by the deposit of lawful money as provided by law; *Provided*, That the amount of such circulating notes shall not in any case exceed ninety per centum of the par value of the bonds deposited as herein provided: *Provided further*, That the national banks which shall hereafter make deposits of lawful money for the retirement in full of their circulation shall, at the time of their deposit, be assessed, for the cost of transporting and redeeming their notes then outstanding a sum equal to the average cost of the redemption of national-bank notes during the preceding year, and shall thereupon pay such assessment. And all national banks which have heretofore made or shall hereafter make deposits of lawful money for the reduction of their circulation, shall be assessed, and shall pay an assessment in the manner specified in section 3 of the act approved June 20th, 1874, for the cost of transporting and redeeming their notes redeemed from such deposits subsequently to June 30th, 1881.

SEC. 9. That any national banking association now organized, or hereafter organized, desiring to withdraw its circulating notes, upon a deposit of lawful money with the Treasurer of the United States, as provided in section 4 of the act of June 20th, 1874, entitled "An act fixing the amount of United States notes, providing for a redistribution of national-bank currency, and for

other purposes," or as provided in this act, is authorized to deposit lawful money and withdraw a proportionate amount of the bonds held as security for its circulating notes in the order of such deposits; and no national bank which makes any deposit of lawful money in order to withdraw its circulating notes shall be entitled to receive any increase of its circulation for the period of six months from the time it made such deposit of lawful money for the purpose aforesaid: *Provided*, That not more than $3,000,000 of lawful money shall be deposited during any calendar month for this purpose: *And provided further*, That the provisions of this section shall not apply to bonds called for redemption by the Secretary of the Treasury, nor to the withdrawal of circulating notes in consequence thereof.

SEC. 10. That upon a deposit of bonds as described by sections 5159 and 5160, except as modified by section 4 of an act entitled "An act fixing the amount of United States notes, providing for a redistribution of the national-bank currency, and for other purposes," approved June 20th, 1894, and as modified by section 8 of this act, the association making the same shall be entitled to receive from the Comptroller of the Currency circulating notes of different denominations, in blank, registered and countersigned as provided by law, equal in amount to ninety per centum of the current market value, not exceeding par, of the United States bonds so transferred and delivered, and at no time shall the total amount of such notes issued to any such association exceed ninety per centum of the amount at such time actually paid in of its capital stock; and the provisions of sections 5171 and 5176 of the Revised Statutes are hereby repealed.

SEC. 12. That the Secretary of the Treasury is authorized and directed to receive deposits of gold coin with the Treasurer or assistant treasurers of the United States, in sums not less than twenty dollars, and to issue certificates therefor in denominations of not less than twenty dollars each, corresponding with the denominations of United States notes. The coin deposited for or representing the certificates of deposits shall be retained in the Treasury for the payment of the same on demand. Said certificates shall be receivable for customs, taxes, and all public dues, and when so received may be reissued; and such certificates, as also silver certificates, when held by any national-banking association, shall be counted as part of its lawful reserve; and no national-banking association shall be a member of any clearing-house in which such certificates shall not be receivable in the settlement of clearing-house balances: *Provided*, That the Secretary of the Treasury shall suspend the issue of such gold certificates whenever the amount of gold coin and gold bullion in the Treasury reserved for the redemption of United States notes falls below $100,000,000; and the provisions of section 5207 of the Revised Statutes shall be applicable to the certificates herein authorized and directed to be issued.

ACT OF AUGUST 7, 1882.—An act making appropriations for sundry civil expenses of the government for the fiscal year ending June 30, 1883, and for other purposes.

[22 Statutes at Large, p. 312.]

For the transportation of silver coins: That the Secretary of the Treasury be, and he is hereby, authorized and directed to transport, free of charge, silver coins when requested to do so: *Provided*, That an equal amount in coin or currency shall have been deposited in the Treasury by the applicant

or applicants; and that there is hereby appropriated $10,000, or so much thereof as may be necessary, for that purpose, and that the same be available from and after the passage of this act. * * *

ACT OF AUGUST 4, 1886.—An act making appropriations for sundry civil expenses of the Government for the fiscal year ending June 30th, 1887, and for other purposes.

[24 Statutes at Large, p. 222.]

Be it enacted, etc., * * * And the Secretary of the Treasury is hereby authorized and required to issue silver-certificates in denominations of one, two, and five dollars, and the silver-certificates herein authorized shall be receivable, redeemable, and payable in like manner and for like purposes as is provided for silver-certificates by the act of February 28th, 1878, entitled "An act to authorize the coinage of the standard silver dollar, and to restore its legal-tender character," and denominations of one, two, and five dollars may be issued in lieu of silver-certificates of larger denominations in the Treasury or in exchange therefor upon presentation by the holders and to that extent said certificates of larger denominations shall be canceled and destroyed.

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TRANSPORTATION OF SILVER COIN: For transportation of silver coin, including fractional silver coin, by registered mail or otherwise, $75,000; and in expending this sum the Secretary of the Treasury is authorized and directed to transport from the Treasury or subtreasuries, free of charge, silver coin when requested to do so: *Provided,* That an equal amount of coin or currency shall have been deposited in the Treasury or such subtreasuries by the applicant or applicants. And the Secretary of the Treasury shall report to Congress the cost arising under this appropriation. * * *

[Similar provisions are contained in succeeding Sundry Civil Appropriation laws.]

ACT OF MARCH 3, 1887.—An act to amend sections 5191 and 5192 of the revised statutes of the United States, and for other purposes.

[24 Statutes at Large, p. 559.]

Be it enacted, etc., That whenever three-fourths in number of the national banks located in any city of the United States having a population of 50,000 people shall make application to the Comptroller of the Currency, in writing, asking that the name of the city in which such banks are located shall be added to the cities named in sections 5191 and 5192 of the Revised Statutes, the Comptroller shall have authority to grant such request, and every bank located in such city shall at all times thereafter have on hand, in lawful money of the United States, an amount equal to at least twenty-five per centum of its deposits, as provided in sections 5191 and 5195 of the Revised Statutes.

SEC. 2. That whenever three-fourths in number of the national banks located in any city of the United States having a population of 200,000 people shall make application to the Comptroller of the Currency, in writing, asking that such city may be a central reserve city, like the city of New York, in which one-half of the lawful-money reserve of the national banks located in other reserve cities may be deposited, as provided in section 5195

of the Revised Statutes, the Comptroller shall have authority, with the approval of the Secretary of the Treasury, to grant such request, and every bank located in such city shall at all times thereafter have on hand, in lawful money of the United States, twenty-five per centum of its deposits, as provided in section 5191 of the Revised Statutes.

SEC. 3. That section 3 of the act of January 14, 1875, entitled an "Act to provide for the resumption of specie payments," be, and the same is, hereby, amended by adding after the words "New York" the words "and the city of San Francisco, California,"

ACT OF MARCH 3, 1887.—An act for the retirement and recoinage of the trade dollar.

[24 Statutes at Large, p. 634.]

Be it enacted etc., That for a period of six months after the passage of this act, United States trade-dollars, if not defaced, mutilated or stamped, shall be received at the office of the Treasurer, or any assistant treasurer of the United States, in exchange for a like amount, dollar for dollar, of standard silver dollars, or of subsidiary coins of the United States.

SEC. 2. That the trade-dollars received by, paid to, or deposited with the Treasurer or any assistant treasurer or national depositary of the United States shall not be paid out or in any other manner issued, but, at the expense of the United States, shall be transmitted to the coinage mints and recoined into standard silver dollars or subsidiary coin, at the discretion of the Secretary of the Treasury: *Provided*, that the trade-dollars recoined under this act shall not be counted as part of the silver bullion required to be purchased and coined into standard dollars as required by the act of February 28, 1878.

SEC. 3. That all laws and parts of laws authorizing the coinage and issuance of United States trade-dollars are hereby repealed.

[Received by the President, February 19, 1887. Became a law without his signature on March 3, 1887.]

ACT OF MARCH 2, 1889,—An act making appropriations for sundry civil expenses of the Government for the fiscal year ending June 10, 1890, and for other expenses.

[25 Statutes at Large, p. 955.]

That hereafter it shall not be lawful to use any portion of the so-called "silver-profit fund" or of the appropriation for "storage of silver-transportation" for the purpose of paying the expenses of the transportation of standard silver dollars from the mints or the subtreasuries to the Treasury at Washington, District of Columbia. * * *

ACT OF JULY 14, 1890—An act directing the purchase of silver bullion and the issue of Treasury notes thereon, and for other purposes.

[26 Statutes at Large, p. 289.]

Be it enacted etc., That the Secretary of the Treasury is hereby directed to purchase, from time to time, silver bullion to the aggregate amount of four million five hundred thousand ounces, or so much thereof as may be

offered in each month, at the market price thereof, not exceeding one dollar for three hundred and seventy-one and twenty-five hundredths grains of pure silver.

And to issue in payment of such purchases of silver bullion Treasury notes of the United States to be prepared by the Secretary of the Treasury, in such form and of such denominations, not less than one dollar nor more than one thousand dollars, as he may prescribe, and a sum sufficient to carry into effect the provisions of this act is hereby appropriated out of any money in the Treasury not otherwise appropriated.

SEC. 2. That the Treasury notes issued in accordance with the provisions of this act shall be redeemable on demand, in coin, at the Treasury of the United States, or at the office of any assistant treasurer of the United States, and when so redeemed may be reissued.

But no greater or less amount of such notes shall be outstanding at any time than the cost of the silver bullion and the standard silver dollars coined therefrom, then held in the Treasury purchased by such notes.

And such Treasury notes shall be a legal tender in payment of all debts, public and private, except where otherwise expressly stipulated in the contract, and shall be receivable for customs, taxes, and all public dues, and when so received may be reissued.

And such notes, when held by any national banking association, may be counted as a part of its lawful reserve.

That upon demand of the holder of any of the Treasury notes herein provided for the Secretary of the Treasury shall, under such regulations as he may prescribe, redeem such notes in gold or silver coin, at his discretion.

It being the established policy of the United States to maintain the two metals on a parity with each other upon the present legal ratio, or such ratio as may be provided by law.

SEC. 3. That the Secretary of the Treasury shall each month coin two million ounces of the silver bullion purchased under the provisions of this act into standard silver dollars until the first day of July, 1891, and after that time he shall coin of the silver bullion purchased under the provisions of this act as much as may be necessary to provide for the redemption of the Treasury notes herein provided for, and any gain or seigniorage arising from such coinage shall be accounted for and paid into the Treasury.

SEC. 4. That the silver bullion purchased under the provisions of this act shall be subject to the requirements of existing law and the regulations of the mint service governing the methods of determining the amount of pure silver contained, and the amount of charges or deductions, if any, to be made.

SEC. 5. That so much of the act of February 28, 1878, entitled "An act to authorize the coinage of the standard silver dollar and to restore its legal tender character," as requires the monthly purchase and coinage of the same into silver dollars of not less than two million dollars nor more than four million dollars' worth of silver bullion, is hereby repealed.

SEC. 6. That upon the passage of this act the balances standing with the Treasurer of the United States to the respective credits of national banks for deposits made to redeem the circulating notes of such banks, and all deposits thereafter received for like purpose, shall be covered into the Treasury as a miscellaneous receipt, and the Treasury of the United States shall redeem from the general cash in the Treasury the circulating notes of said banks which may come into his possession subject to redemption.

And upon the certificate of the Comptroller of the Currency that such notes

have been received by him and that they have been destroyed and that no new notes will be issued in their place, reimbursement of their amount shall be made to the Treasurer, under such regulations as the Secretary of the Treasury may prescribe, from an appropriation hereby created, to be known as 'National bank notes: Redemption account,'

But the provisions of this act shall not apply to the deposits received under section 3 of the act of June 20th, 1874, requiring every National bank to keep in lawful money with the Treasurer of the United States a sum equal to five per centum of its circulation, to be held and used for the redemption of its circulating notes.

And the balance remaining of the deposits so covered shall, at the close of each month, be reported on the monthly public debt statement as debt of the United States bearing no interest.

SEC. 7. That this act shall take effect thirty days from and after its passage.

ACT OF AUGUST 30, 1890 — An act making appropriations for sundry civil expenses of the Government for the fiscal year ending June 30, 1891, and for other purposes.

[26 Statutes at Large, p. 371.]

* * * [Appropriation for the Bureau of Engraving and Printing.] *Provided*, That no portion of this sum shall be expended for printing United States notes of larger denomination than those canceled or retired. * * *

[Similar provisions have been contained in subsequent appropriation acts.]

ACT OF SEPTEMBER 26, 1890 — An act to discontinue the coinage of the three-dollar and one-dollar gold pieces and three-cent nickel piece.

[26 Statutes at Large, p. 485.]

Be it enacted, etc., That from and after the passage of this act the coinage of the three-dollar gold piece, the one-dollar gold piece, and the three-cent nickel piece be, and the same is hereby, prohibited, and the pieces named shall not be struck or issued by the Mint of the United States.

SEC. 2. That as fast as the said coins shall be paid into the Treasury of the United States they shall be withdrawn from circulation and be recoined into other denominations of coins.

SEC. 3. That all laws and parts of laws in conflict with this act are hereby repealed.

ACT OF MARCH 3, 1891 — An act making appropriations for sundry civil expenses of the Government for the fiscal year ending June 30, 1892, and for other purposes.

[26 Statutes at Large, p. 948.]

* * * For recoinage of the uncurrent fractional silver coins abraded below the limit of tolerance in the Treasury, to be expended under the direction of the Secretary of the Treasury, $150,000: *Provided*, That the Secretary of the Treasury shall, as soon as practicable, coin into standard silver dollars the trade-dollar bulliou and trade dollars now in the Treasury, the expense thereof to be charged to the silver profit fund. * * *

ACT OF NOVEMBER 1, 1893 — An act to repeal a part of an act approved July 14th, 1890, entitled "An Act directing the purchase of silver bullion and the issue of Treasury notes thereon, and for other purposes."

[28 Statutes at Large, p. 4.]

Be it enacted, etc., That so much of the act approved July 14th, 1890, entitled "an act directing the purchase of silver bullion and issue of Treasury notes thereon, and for other purposes," as directs the Secretary of the Treasury to purchase from time to time silver bullion to the aggregate amount of 4,500,000 ounces, or so much thereof as may be offered in each month at the market price thereof, not exceeding one dollar for three hundred and seventy-one and twenty-five one-hundredths grains of pure silver, and to issue in payment for such purchases Treasury notes of the United States, be, and the same is hereby repealed. And it is hereby declared to be the policy of the United States to continue the use of both gold and silver as standard money, and to coin both gold and silver into money of equal intrinsic and exchangeable value, such equality to be secured through international agreement, or by such safeguards of legislation as will insure the maintenance of the parity in value of the coins of the two metals, and the equal power of every dollar at all times in the markets and in the payment of debts. And it is hereby further declared that the efforts of the Government should be steadily directed to the establishment of such a safe system of bimetallism as will maintain at all times the equal power of every dollar coined or issued by the United States, in the markets and in the payment of debts.

APPENDIX II

MONETARY STATISTICS

APPENDIX II.

No. 1.—TREASURY STATEMENT OF MONEY IN CIRCULATION JANUARY 1, 1898.

	General Stock, Coined or Issued	In Treasury	Amount in Circulation January 1, 1898
Gold Coin	$699,478,536	$151,910,176	$547,568,360
Standard Silver Dollars	455,818,122	394,327,049	61,491,073
Subsidiary Silver	76,400,207	10,679,899	65,720,308
Gold Certificates	38,128,149	1,570,460	36,557,689
Silver Certificates	387,925,504	11,229,912	376,695.592
Treasury Notes of 1890	106,348,280	2,904,344	103,443,936
United States Notes	346,681,016	84,200,089	262,480,927
Currency Certificates	44,555,000	1,240,000	43,315,000
National Bank Notes	229,014,641	5,186,886	223,827,755
Totals	2,384,349,455	663,248,815	1,721,100,640
Gold Bullion in Treasury		$ 45,559,060	....
Silver Bullion in Treasury (cost)		102,284,736	....

Population of the United States January 1, 1898, estimated at 73,725,000 : circulation per capita $23.34.

No. 2.—PAPER CURRENCY OF EACH DENOMINATION OUTSTANDING DECEMBER 31, 1897.

Denomination	United States Notes	Treasury Notes of 1890	National Bank Notes	Gold Certificates	Silver Certificates	Total
$ 1.00	$ 2,754,763	$15,346,889	$ 350,536	....	$31,538,550	$ 49,990,738
2.00	2,447,878	10,204,776	169,032	....	19,271,678	32,093,364
5.00	62,582,267	32,267,755	72,827,610	....	106,211,195	273,888,827
10.00	82,835,501	31,650,930	70,747,130	....	119,233,366	304,466,927
20.00	67,971,032	10,255,480	52,566,400	$ 4,795,494	71,162,410	206,750,816
50.00	14,208,375	285,350	10,679,450	2,722,655	14,361,435	42,257,265
100.00	24,051,200	2,382,100	21,504,100	3,712,000	25,821,370	77,470,770
500.00	15,690,000	....	112,000	3,448,500	157,500	19,408,000
1,000.00	75,115,000	3,955,000	28,000	5,634,500	168,000	84,900,500
5,000.00	15,000	....	....	5,475,000	....	5,490,000
10.000.00	10,000	....	....	12,340,000	....	12,350,000
Fractional parts	....	....	30,382	....	....	30,382
Total	347,681,016	106,348,280	229,014,640	38,128,149	387,925,504	1,109,097,589
Unknown, destroyed	1,000,000	....	....	....	....	1,000,000
Net	346,681,016	106,348,280	229,014,640	38,128,149	387,925,504	1,108,097,589

No. 3.—ESTIMATED AMOUNT OF MONEY IN ACTUAL CIRCULATION* IN THE UNITED STATES AT THE CLOSE OF EACH FISCAL YEAR FROM 1860 TO 1897 INCLUSIVE.§

(Finance Report 1897, pp. cxxxi–cxxxviii.)

July 1st	Gold coin	Gold certificates	Silver dollars	Silver certificates	Subsidiary silver	United States notes‡
1860	$228,304,775†	....	....	....	....	....
1861	246,400,000†	....	....	....	....	....
1862	25,000,000†	....	....	....	....	$ 72,865,665
1863	25,000,000†	....	....	....	....	312,481,418
1864	25,000,000†	....	....	....	....	415,115,990
1865	25,000,000†	....	....	....	....	378,916,742
1866	25,000,000†	....	....	....	....	327,792,305
1867	25,000,000†	....	....	....	....	319,437,702
1868	25,000,000†	....	....	....	....	328,571,665
1869	25,000,000†	....	....	....	....	314,702,094
1870	25,000,000†	....	....	....	....	324,962,638
1871	25,000,000†	....	....	....	....	343,068,970
1872	25,000,000†	....	....	....	....	346,168,680
1873	25,000,000†	....	....	....	....	348,464,145
1874	25,000,000†	....	....	....	....	371,421,452
1875	25,000,000†	....	....	....	....	349,686,335
1876	25,000,000†	....	....	....	$21,055,128	331,447,378
1877	25,000,000†	....	....	....	37,884,853	337,899,344
1878	25,000,000†	....	$ 1,209,251	$ 7,080	53,918,322	320,905,895
1879	110,505,362	$ 15,279,820	8,036,439	414,480	61,346,584	301,644,112
1880	225,695,779	7,963,900	20,110,557	5,789,569	48,511,788	327,895,457
1881	315,312,877	5,759,520	29,342,412	39,110,729	46,839,364	328,126,924
1882	358,251,325	5,029,020	32,403,820	54,506,090	46,379,949	325,255,427
1883	344,653,495	59,807,370	35,651,450	72,620,686	46,474,299	323,242,177
1884	340,624,203	71,146,640	40,690,200	96,427,011	45,660,808	318,687,214
1885	341,668,411	126,729,730	39,086,969	101,530,946	43,702,921	331,218,637
1886	358,219,575	76,044,375	52,668,623	88,116,225	46,173,990	323,812,699
1887	376,540,681	91,225,437	55,548,721	142,118,017	48,583,865	326,667,219
1888	391,114,033	121,094,650	55,527,396	200,759,657	50,362,314	308,000,040
1889	376,481,568	117,130,229	54,457,299	257,155,565	51,477,164	316,439,191
1890	374,258,923	130,830,859	56,278,749	297,556,238	54,032,587	334,688,977
1891	407,319,163	120,063,069	58,826,179	307,235,966	58,219,220	343,207,360
1892	408,568,824	141,093,619	56,817,462	326,693,465	63,293,704	339,399,904
1893	408,535,663	92,642,189	56,929,673	326,823,848	65,469,866	330,774,426
1894	495,976,730	66,339,849	52,564,662	326,990,736	58,510,957	325,524,602
1895	479,637,961	48,381,309	51,986,043	319,622,941	60,350,014	319,093,985
1896	454,905,064	42,198,119	52,116,904	330,657,191	60,204,451	256,139,868
1897	517,589,688	37,285,339	51,940,281	357,849,312	59,616,409	306,914,622

* Not including money in the treasury.

† Includes all specie estimated to be in circulation—silver as well as gold.

‡ Including notes represented in circulation by currency certificates.

§ "These tables have been compiled from the records of the department which were made on or about the dates specified. They include everything properly belonging in a statement relative to circulation, except minor coins, which are not stated, because it is difficult to estimate accurately the amount in use. The figures agree with the reports published from year to year, and an estimate has been added of the amount of specie in circulation on the Pacific coast during the period of suspension of specie payments (1862 to 1878 inclusive). It will be observed that no attempt has been made in the table for 1862 to estimate the quantity of the nondescript currency of postage stamps, tickets, due bills, etc., which served as small change during the period subsequent to the disappearance of subsidiary silver and prior to the issue of the postal currency and fractional currency authorized by the acts of July 17, 1862, and March 3, 1863. Also that the one and two-year notes of 1863 and compound-interest notes supposed by many persons to have been in circulation are not included in any of the tables. The small quantities of these classes of interest-bearing obligations which were in circulation as money for a few months when first issued had been absorbed as investment securities and withdrawn from circulation before July 1, 1865, which is the date commonly selected for comparison with the present time as to money in circulation. The seven-thirty notes are also excluded from the table. They were not used as money, nor paid out as such by the treas-

No. 3. — ESTIMATED AMOUNT OF MONEY IN ACTUAL CIRCULATION IN THE UNITED STATES AT THE CLOSE OF EACH FISCAL YEAR FROM 1860 TO 1897 INCLUSIVE — *Continued.*

(Finance Report 1897, pp. cxxxi–cxxxviii.)

Demand notes	National bank notes	State bank notes	Fractional currency	Total circulation	Per capita	July 1st
....	....	$207,102,477	....	$ 435,407,252	13.85	1860
....	....	202,005,767	....	448,405,767	13.98	1861
$53,040,000	....	183,792,079	....	334,697,744	10.23	1862
3,351,020	....	238,677,218	$15,884,382	595,394,038	17.84	1863
....	$ 31,235,270	179,157,717	19,132,501	669,641,478	19.67	1864
....	146,137,860	142,919,638	21,728,755	714,702,995	20.57	1865
....	276,012,713	19,996,163	24,687,063	673,488,244	18.99	1866
....	286,763,961	4,484,112	26,306,294	661,992,069	18.28	1867
....	294,368,873	3,163,771	28,999,352	680,103,661	18.39	1868
....	291,749,684	2,558,874	30,442,239	664,452,891	17.60	1869
....	288,648,081	2,222,793	34,379,282	675,212,794	17.50	1870
....	311,405,672	1,968,058	34,446,305	715,889,005	18.10	1871
....	329,037,005	1,700,935	36,402,929	738,309,549	18.19	1872
....	338,962,475	1,379,184	38,076,005	751,881,809	18.04	1873
....	340,265,544	1,162,453	38,233,582	776,083,031	18.13	1874
....	340,546,545	964,497	37,904,570	754,101,947	17.16	1875
....	316,120,702	1,047,335	32,938,845	727,609,388	16.12	1876
....	301,289,025	....	20,241,661	722,314,883	15.58	1877
....	311,724,361	....	16,367,725	729,132,634	15.32	1878
....	321,404,996	....	....	818,631,793	16.75	1879
....	337,415,178	....	....	973,382,228	19.41	1880
....	349,746,293	....	....	1,114,238,119	21.71	1881
....	352,464,788	....	....	1,174,290,419	22.37	1882
....	347,856,219	....	....	1,230,305,696	22.91	1883
....	330,689,893	....	....	1,243,925,969	22.65	1884
....	308,631,001	....	....	1,292,568,615	23.02	1885
....	307,665,038	....	....	1,252,700,525	21.82	1886
	276,855,203	....	....	1,317,539,143	22.45	1887
Treasury Notes of 1890	245,312,780	....	....	1,372,170,870	22.88	1888
	207,220,633	....	....	1,380,361,649	22.52	1889
	181,604,937	....	....	1,429,251,270	22.82	1890
40,348,704	162,221,046	....	....	1,497,440,707	23.41	1891
98,258,692	167,221,517	....	....	1,601,347,187	24.44	1892
140,855,614	174,669,966	....	....	1,596,701,245	23.85	1893
134,681,429	200,219,743	....	....	1,660,808,708	24.28	1894
115,943,169	206,953,051	....	....	1,601,968,473	22.93	1895
95,045,247	215,168,122	....	....	1,506,434,966	21.10	1896
83,469,517	225,544,351	....	....	1,640,209,519	22.49	1897

ury, but were negotiated as a loan and issued by the government to investors in exchange for legal tender notes, being sold at par and accrued interest like any other loan. A small amount of these, however—less than ten millions—was issued to soldiers in the field, but the notes were taken only by the soldiers who desired to save, and were, therefore, not placed in circulation. The total amount of seven-thirty notes negotiated in 1864 and 1865 was $829,992,500, of which $44,509,900 were of the denomination of $50, $137,634,600 of $100, and the remainder $647,848,000 were $500s, $1000s, and $5000s. The receipt of legal tender notes by the department in exchange for seven-thirty notes did not cause a contraction of the currency, because the legal tenders so received were immediately paid out by the government in settlement of demand liabilities then pressing.

"The one and two-year notes and compound-interest notes were sufficiently unlike the legal tenders to attract notice and cause an examination of their terms. In this way their interest-bearing quality was speedily discovered, and they were very soon retired. The seven-thirties were unlike the legal tenders, except in color, being much larger and having coupons attached.

"There are two facts which prove conclusively that these obligations were not in active circulation: one is that they were all redeemed within three years without creating monetary disturbance; the other i that nearly all of them came back into the treasury as clean and unworn as on the day of their issue—a condition which they would have not presented had they been in active circulation."—*Secretary of the Treasury*, 1891.

No. 4. ESTIMATED PAPER CURRENCY IN THE UNITED STATES AT THE CLOSE OF EACH FISCAL YEAR.[1]

[Compiled from Report Secretary of Treasury, 1897, pp. cxxxi–cxxxviii, 99–100.]

July 1	Old Demand Notes	United States Notes	State Bank Notes	Fractional Currency[2]	Gold Certificates	Silver Certificates	National Bank Notes	Total Paper Currency
1862......	$51,105,235.00	$ 96,620,000	$183,792,079	....	....	....	....	$ 331,517,314.00
1863......	3,384,000.00	387,646,589	238,677,218	$20,192,456.00	....	....	....	649,900,263.00
1864......	789,037.50	447,300,203	179,157,717	22,324,283.10	....	....	$ 31,235,270	680,806,510.60
1865......	472,603.50	431,066,428	142,919,638	25,033,128.76	....	....	146,137,860	745,629,658.26
1866......	272,162.75	400,780,306	19,996,163	27,008,875.36	$ 10,947,860	....	281,479,908	740,485,275.11
1867......	208,432.50	371,783,597	4,484,112	28,474,623.02	18,773,580	....	298,625,379	722,349,723.52
1868......	143,912.00	356,000,000	3,163,771	32,727,908.47	17,678,640	....	299,762,855	709,477,086.47
1869......	123,739.25	356,000,000	2,558,874	32,114,637.36	33,086,180	....	299,742,745	723,626,175.61
1870......	106,256.00	356,000,000	2,222,793	39,878,684.48	34,547,120	....	299,766,984	732,521,837.48
1871.....	96,505.50	356,000,000	1,968,058	40,582,874.56	19,886,300	....	318,261,241	736,794,979.06
1872......	88,296.25	357,500,000	1,700,935	40,855,835.27	32,086,300	....	337,664,795	769,896,161.52
1873......	79,967.50	356,000,000	1,379,184	44,799,365.44	39,460,000	....	347,267,061	788,985,577.94
1874......	76,732.50	381,999,073	1,162,453	45,912,003.34	22,825,100	....	351,981,032	803,956,393.84
1875......	70,107.50	375,771,580	964,497	42,129,424.19	21,796,300	....	354,408,008	795,139,916.69
1876......	66,917.50	369,772,284	1,047,335	34,446,595.39	28,681,400	....	332,998,336	767,012,867.89
1877.....	63,962.50	359,764,332	....	20,403,137.34	41,572,600	....	317,048,872	738,852,903.84
1878......	62,297.50	346,681,016	....	16,547,768.77	44,367,000	$ 1,850,410	324,514,284	734,022,776.27
1879......	61,470.00	346,681,016	....	15,842,610.11	15,413,700	2,539,950	329,691,697	710,230,443.11
1880......	60,975.00	346,681,016	....	15,590,892.70	8,004,600	12,374,270	344,505,427	727,217,180.70
1881......	60,535.00	346,681,016	....	15,481,891.65	5,782,920	51,166,530	355,042,675	774,215,567.65
1882......	59,695.00	346,681,016	....	15,423,186.10	5,037,120	66,096,710	358,742,034	792,039,761.10
1883......	58,985.00	346,681,016	....	15,376,629.14	82,378,640	88,616,831	356,073,281	889,185,382.14
1884......	58,440.00	346,681,016	....	15,355,999.64	98,392,660	120,891,691	339,499,883	920,879,689.64
1885......	57,950.00	346,681,016	....	15,340,114.21	140,323,140	139,901,646	318,576,711	960,880,577.21
1886......	57,445.00	346,681,016	....	15,330,025.85	131,174,245	115,977,675	311,699,454	920,919,860.85
1887......	57,130.00	346,681,016		15,322,902.70	121,486,817	145,543,150	279,217,788	908,308,803.70
1888......	56,807.50	346,681,016	Treasury Notes of 1890	15,298,582.15	142,023,150	229,491,772	252,368,321	985,919,648.65
1889......	56,442.50	346,681,016		15,292,628.80	154,048,552	262,629,746	211,378,963	990,087,348.30
1890......	56,032.50	346,681,016		15,287,449.30	157,542,979	301,539,751	185,970,775	1,007,078,002.80
1891......	55,647.50	346,681,016	$ 50,228,417	15,283,617.93	152,461,429	314,715,185	167,927,974	1,047,353,286.43
1892......	55,647.50	346,681,016	101,712,071	15,279,400.95	156,598,929	331,614,304	172,683,850	1,124,625,218.45
1893......	55,647.50	346,681,016	147,190,227	15,276,442.95	92,846,189	330,957,504	178,713,872	1,111,720,898.45
1894......	54,847.50	346,681,016	152,584,417	15,273,075.75	66,387,899	337,148,504	206,854,787	1,124,984,546.25
1895......	54,847.50	346,681,016	146,088,400	15,270,055.82	48,469,959	328,894,504	211,691,035	1,097,150,817.32
1896......	54,347.50	346,681,016	129,683,280	15,267,122.47	42,818,189	342,619,504	226,000,547	1,103,124,005.97
1897......	54,347.50	346,681,016	114,867,280	15,263,640.47	38,782,169	375,479,504	230,668,034	1,121,795,990.97

[1] Includes all currency "outstanding;" that is, all issued and not cancelled. This table thus includes not only the amounts in actual circulation, but also any amounts held in the Treasury. The currency certificates outstanding are not included, inasmuch as they represent equivalent amounts of United States notes already included.

[2] Of the fractional currency outstanding, the act of June 21, 1879, estimated $8,375,934 as lost or destroyed.

No. 5.—APPROXIMATE STOCKS OF MONEY IN THE AGGREGATE AND PER CAPITA IN THE PRINCIPAL COUNTRIES OF THE WORLD.

	Countries	Monetary system	Population	Stock of gold	Stock of silver: Full tender	Stock of silver: Limited tender	Stock of silver: Total	Uncovered paper	Per capita: Gold	Per capita: Silver	Per capita: Paper	Per capita: Total	
1	United States *a*	Gold*	72,900,000	$ 696,300,000	$ 558,700,000	$ 75,800,000	$ 634,500,000	*l* $397,000,000	$9.55	$8.70	$5.45	$23.70	1
2	United Kingdom	Gold	39,600,000	*b* 584,000,000	....	*b* 121,700,000	121,700,000	*c* 112,100,000	14.75	3.07	2.83	20.65	2
3	France	Gold*	38,500,000	*c* 772,000,000	*c* 386,000,000	*c* 57,900,000	443,900,000	*c* 119,200,000	20.05	11.53	3.10	34.68	3
4	Germany	Gold	52,300,000	*d* 654,500,000	*d* 95,200,000	*d* 117,600,000	212,800,000	*c* 123,800,000	12.51	4.07	2.37	18.95	4
5	Belgium	Gold*	6,400,000	*e* 35,000,000	*e* 50,000,000	*e* 7,000,000	57,000,000	*c* 72,500,000	5.47	8.91	11.32	25.70	5
6	Italy	Gold†	31,300,000	*c* 96,900,000	*c* 18,900,000	*c* 26,500,000	45,400,000	*c* 161,000,000	3.10	1.45	5.14	9.69	6
7	Switzerland	Gold*	3,000,000	*f* 24,000,000	....	*f* 10,700,000	10,700,000	*c* 14,300,000	8.00	3.56	4.77	16.33	7
8	Greece	Gold†	2,200,000	*e* 500,000	*e* 500,000	*e* 1,000,000	1,500,000	*c* 26,000,000	.23	.68	11.81	12.72	8
9	Spain	Gold†	18,000,000	*e* 45,000,000	....	*e* 49,000,000	49,000,000	*c* 103,000,000	2.50	2.72	5.72	10.94	9
10	Portugal	Gold†	5,100,000	*e* 5,500,000	....	*e* 9,500,000	9,500,000	*c* 49,800,000	1.08	1.86	9.76	12.70	10
11	Roumania	Gold	5,400,000	*c* 38,600,000	....	*c* 10,600,000	10,600,000	*c* 11,800,000	7.15	1.96	2.19	11.30	11
12	Servia	Gold	2,300,000	*c* 2,700,000	....	*c* 1,700,000	1,700,000	*c* 2,400,000	1.18	2.04	1.04	4.26	12
13	Austria-Hungary	Gold*†	45,000,000	*c* 178,500,000	*c* 23,700,000	*c* 40,000,000	63,700,000	*c* 177,600,000	3.97	1.41	3.95	9.33	13
14	Netherlands	Gold*	4,900,000	*c* 21,900,000	*c* 52,800,000	*c* 3,300,000	56,100,000	*c* 37,900,000	4.47	11.45	7.73	23.65	14
15	Norway	Gold	2,000,000	*c* 7,500,000	....	*c* 2,000,000	2,000,000	*c* 3,800,000	3.75	1.00	1.90	6.65	15
16	Sweden	Gold	5,000,000	*c* 10,600,000	....	*c* 4,900,000	4,900,000	*c* 19,000,000	2.12	.98	3.80	6.90	16
17	Denmark	Gold	2,300,000	*c* 15,400,000	....	*c* 5,400,000	5,400,000	*c* 6,400,000	6.70	2.35	2.78	11.83	17
18	Russia	Gold*	126,000,000	*g* 586,900,000	*c* 32,300,000	*e* 41,900,000	74,200,000	*c* 467,200,000	4.66	.59	3.70	8.95	18
19	Turkey	Gold*	22,000,000	*e* 50,000,000	*e* 30,000,000	*d* 10,000,000	40,000,000	....	2.27	1.82	....	4.09	19
20	Australasia	Gold	5,000,000	*c* 132,100,000	....	*e* 7,000,000	7,000,000	*c* 22,500,000	26.42	1.40	4.50	32.32	20
21	Egypt	Gold	7,800,000	*d* 129,300,000	....	*c* 6,400,000	6,400,000	....	16.58	.82	....	17.40	21
22	Mexico	Silver	13,000,000	*e* 8,600,000	*c* 106,000,000	....	106,000,000	*c* 4,000,000	.67	8.15	3.07	11.89	22
23	Central American States	Silver	3,300,000	*e* 1,000,000	18,900,000	....	18,900,000	*c* 8,400,000	.30	5.73	2.54	8.57	23
24	South American States *h*	Silver	37,500,000	*e* 65,000,000	*e* 25,000,000	*e* 10,000,000	35,000,000	*e* 550,000,000	1.73	.93	14.67	17.33	24
25	Japan	Gold*	45,000,000	*c* 80,100,000	75,500,000	18,500,000	94,000,000		1.78	2.09	....	3.87	25
26	India	Silver‡	296,000,000	....	*i* 950,000,000	....	950,000,000	*j* 37,000,000	....	3.21	.12	3.33	26
27	China	Silver	360,000,000	....	*e* 750,000,000	....	750,000,000	....	....	2.08	....	2.08	27
28	Straits Settlements *k*	Silver	3,800,000	....	*d* 240,000,000	*d* 2,000,000	242,000,000	....	....	63.68	....	63.68	28
29	Canada	Gold	5,300,000	*c* 16,000,000	....	*c* 5,000,000	5,000,000	*c* 35,000,000	3.01	.95	6.60	10.56	29
30	Cuba	Gold*†	1,800,000	*e* 5,000,000	*e* 1,500,000	....	1,500,000	....	2.78	.83	....	3.61	30
31	Haiti	Gold*	1,000,000	*c* 4,000,000	*c* 3,000,000	*e* 1,500,000	4,500,000	*c* 4,100,000	4.00	4.50	4.10	12.60	31
32	Bulgaria	Gold*	3,300,000	*e* 1,000,000	*e* 3,400,000	*e* 3,400,000	6,800,000	....	.30	2.06	....	2.36	32
33	Siam	Silver	5,000,000	*c* 20,000,000	*c* 193,400,000	....	193,400,000	....	4.00	38.68	....	42.68	33
34	Hawaii	Gold*	100,000	*c* 5,000,000	*c* 1,000,000	....	1,000,000	....	50.00	10.00	....	60.00	34
35	Cape Colony	Gold	1,700,000	*b* 37,500,000	....	*b* 1,000,000	1,000,000	....	22.06	.58	....	22.64	35
36	South African Republic	Gold	800,000	*b* 29,200,000	....	*b* 1,200,000	1,200,000	....	36.50	1.50	....	38.00	36
	Total	....	....	$4,359,600,000	$3,615,800,000	$652,500,000	$4,268,300,000	$2,565,800,000	....	..		....	

* In these countries silver is a full legal tender, but coinage discontinued or carried on only to a limited extent for government account, by which means the gold standard is maintained. In Germany also some old legal tender silver is still current.

† Actual standard, paper, more or less depreciated.

‡ By the closing of the mints to the free coinage of silver, and steps looking to the establishment of the gold standard, the standard of India has been raised from that of silver, so that the rupee for 1897 has been worth about 50 per cent. more than the silver it contains.

a July 1, 1897; all other countries January 1897. *b* Money and prices, United States State Department. *c* Information furnished through United States representatives. *d* Haupt. *e* Estimate, Bureau of the Mint. *f* C. Cramer Frey. *g* London *Economist*. *h* Except Venezuela and Chili, and some countries with depreciated paper standard. *i* F. C. Harrison. *j* Indian Currency Committee report. *k* Includes Aden and Perim, Ceylon, Hongkong, Labuan, and Straits Settlements. *l* This amount consists of the national bank notes issued, plus the gold certificates, currency certificates, and United States notes outstanding, minus the amount of gold coin and bullion in the treasury.

No. 6. APPORTIONMENT OF MONEY IN THE TREASURY ON JANUARY 1, 1898, BETWEEN THE FISCAL DEPARTMENT OF THE TREASURY AND THE PROPOSED DIVISION OF ISSUE AND REDEMPTION.

TREASURY, FISCAL DEPARTMENT.	
Gold coin, - -	$20,243,659
Gold certificates, -	1,570,460
Silver dollars, - -	1,456,997
Silver certificates, -	11,229,912
Silver bullion, - -	881,004
Subsidiary silver, -	9,679,899
Minor coin, - -	1,086,589
United States notes,	7,358,943
Currency certificates,	1,240,000
Treasury notes of 1890,	2,904,344
Bonds and interest paid, and fractional currency, - -	29,453
Deposits in National banks, - - -	49,182,717
Total, - -	$106,865,977
Less outstanding checks and drafts, disbursing officers' balances, etc., -	40,723,584
Available cash balance, - - -	$66,140,393

DIVISION OF ISSUE AND REDEMPTION.	
Gold coin and bullion:	
Held against gold certificates, - - -	$ 38,128,149
5 per cent. of $455,818.122 (silver dollars), - -	22,790,906
25 per cent. of $346,681,016 (U. S. notes), and $106,348,280 (treasury notes),	113,257,324
Total gold, - -	$ 174,176,379
Silver dollars held against certificates, - - -	$ 387,925,504
Silver dollars held against treasury notes, - - -	4,944,548
Silver bullion (cost, $101,403,732.25), - - - -	68,000,000
Subsidiary silver and minor coin,[1] - - - -	1,000,000
Total silver and minor coin,	$ 461,870,052
United States notes held against currency certificates,	$ 44,555,000
Grand Total, - - -	$ 680,601,431
NATIONAL BANK NOTE REDEMPTION FUND.	
National bank notes, -	$ 5,186,886
Gold coin, - - - -	3,049,197
Total, - - - -	$ 8,236,083
NATIONAL BANK NOTE RETIREMENT FUND.	
United States notes,[2] - -	$ 32,286,146

[1] There being no definite provision in the plan as to the precise amount of subsidiary and minor coins which should be transferred to this division, this amount is suggested as typical of the necessary transfer.

[2] United States notes are used here merely as indicative of "lawful money," though any other forms of lawful money might be used in making the transfer.

No. 7.—PRODUCT OF GOLD AND SILVER IN THE UNITED STATES, 1792–1896.

[Estimate for 1792-1872 by R. W. Raymond, commissioner; since 1872 by the Bureau of the Mint.]
[Report Director Mint 1897, p. 51; Statistical Abstract, 1896, p. 41.]

Calendar year	Gold		Silver	
	Fine ounces	Value	Fine ounces	Commercial value[1]
1792–July 31, 1834...	677,250	$ 14,000,000	Insignificant	Insignificant
1834, July 31–1844...	362,812	7,500,000	193,363	$ 253,000
1845...............	48,778	1,008,327	38,672	50,196
1846...............	55,116	1,139,357	38,672	50,274
1847...............	43,009	889,085	38,672	50,583
1848...............	483,750	10,000,000	38,672	50,428
1849...............	1,935,000	40,000,000	38,672	50,622
1850...............	2,418,750	50,000,000	38,672	50,892
1851...............	2,660,625	55,000,000	38,672	51,704
1852...............	2,902,500	60,000,000	38,672	51,279
1853...............	3,144,375	65,000,000	38,672	52,130
1854...............	2,902,500	60,000,000	38,672	52,130
1855...............	2,660,625	55,000,000	38,672	51,975
1856...............	2,660,625	55,000,000	38,672	51,975
1857...............	2,660,625	55,000,000	38,672	52,323
1858...............	2,418,750	50,000,000	386,725	519,752
1859...............	2,418,750	50,000,000	77,345	105,188
1860...............	2,225,250	46,000,000	116,015	157,000
1861...............	2,080,125	43,000,000	1,546,875	2,062,000
1862...............	1,896,300	39,200,000	3,480,469	4,685,000
1863...............	1,935,000	40,000,000	6,574,219	8,842,000
1864...............	2,230,088	46,100,000	8,507,812	11,443,000
1865...............	2,574,759	53,225,000	8,701,171	11,642,000
1866...............	2,588,063	53,500,000	7,734,375	10,356,000
1867...............	2,502,197	51,725,000	10,441,406	13,866,000
1868...............	2,322,000	48,000,000	9,281,250	12,307,000
1869...............	2,394,563	49,500,000	9,281,250	12,298,000
1870...............	2,418,750	50,000,000	12,375,000	16,734,000
1871...............	2,104,313	43,500,000	17,789,062	23,578,000
1872...............	1,741,500	36,000,000	22,236,328	29,396,000
1873...............	1,741,500	36,000,000	27,650,000	35,890,000
1874...............	1,620,563	33,500,000	28,849,000	36,869,000
1875...............	1,615,725	33,400,000	24,518,000	30,549,000
1876...............	1,930,162	39,900,000	30,009,000	34,690,000
1877...............	2,268,788	46,900,000	30,783,000	36,970,000
1878...............	2,476,800	51,200,000	34,960,000	40,270,000
1879...............	1,881,787	38,900,000	31,550,000	35,430,000
1880...............	1,741,500	36,000,000	30,320,000	34,720,000
1881...............	1,678,612	34,700,000	33,260,000	37,850,000
1882...............	1,572,187	32,500,000	36,200,000	41,120,000
1883...............	1,451,250	30,000,000	35,730,000	39,660,000
1884...............	1,489,950	30,800,000	37,800,000	42,070,000
1885...............	1,538,325	31,800,000	39,910,000	42,500,000
1886...............	1,693,125	35,000,000	39,440,000	39,230,000
1887...............	1,596,375	33,000,000	41,260,000	40,410,000
1888...............	1,604,841	33,175,000	45,780,000	43,020,000
1889...............	1,587,000	32,800,000	50,000,000	46,750,000
1890...............	1,588,880	32,845,000	54,500,000	57,225,000
1891...............	1,604,840	33,175,000	58,330,000	57,630,000
1892...............	1,596,375	33,000,000	63,500,000	55,563,000
1893...............	1,739,323	35,955,000	60,000,000	46,800,000
1894...............	1,910,813	39,500,000	49,500,000	31,422,000
1895...............	2,254,760	46,610,000	55,727,000	36,445,000
1896...............	2,568,132	53,088,000	58,835,000	39,655,000
Total........	102,218,361	$2,113,034,769	1,117,636,401	$1,041,648,451

[1] At the average market price for the year.

No. 8. — PRODUCTION OF GOLD AND SILVER IN THE WORLD SINCE THE DISCOVERY OF AMERICA.

(From a table of averages for certain periods, compiled by Dr. Adolph Soetbeer.)

Period	Gold				Silver			
	Annual average for period		Total for period		Annual average for period		Total for period	
	Fine ounces	Value	Fine ounces	Value	Fine ounces	Com'ercial value	Fine ounces	Commercial value
1493–1520	186,470	$3,855,000	5,221,160	$107,931,000	1,511,050	$2,911,000	42,309,400	$78,597,000
1521–1544	230,194	4,759,000	5,524,656	114,205,000	2,899,930	5,328,000	69,598,320	127,872,000
1545–1560	273,596	5,656,000	4,377,544	90,492,000	10,017,940	18,333,000	160,287,040	293,328,000
1561–1580	219,906	4,546,000	4,398,120	90,917,000	9,628,925	17,336,000	192,578,500	346,720,000
1581–1600	237,267	4,905,000	4,745,340	98,095,000	13,467,635	23,548,000	269,352,700	470,960,000
1601–1620	273,918	5,662,000	5,478,360	113,248,000	13,596,235	22,967,000	271,924,700	459,340,000
1621–1640	266,845	5,516,000	5,336,900	110,324,000	12,654,240	18,657,000	253,084,800	373,140,000
1641–1660	281,955	5,828,000	5,639,110	116,571,000	11,776,545	16,752,000	235,530,900	335,040,000
1661–1680	297,709	6,154,000	5,954,180	123,084,000	10,834,550	14,931,000	216,691,000	298,620,000
1681–1700	346,095	7,154,000	6,921,895	143,088,000	10,992,085	15,148,000	219,841,700	302,960,000
1701–1720	412,163	8,520,000	8,243,260	170,403,000	11,432,540	15,501,000	228,650,800	310,020,000
1721–1740	613,422	12,681,000	12,268,440	253,611,000	13,863,080	19,002,000	277,261,600	380,040,000
1741–1760	791,211	16,356,000	15,824,230	327,116,000	17,140,612	24,002,000	342,812,235	480,040,000
1761–1780	665,666	13,761,000	13,313,315	275,211,000	20,985,591	29,542,000	419,711,820	590,840,000
1781–1800	571,948	11,823,000	11,438,970	236,464,000	28,261,779	38,737,000	565,235,580	774,740,000
1801–1810	571,563	11,815,000	5,715,627	118,152,000	28,746,922	38,125,000	287,469,225	381,250,000
1811–1820	367,957	7,606,000	3,679,568	76,063,000	17,385,755	23,186,000	173,857,555	231,860,000
1821–1830	457,044	9,448,000	4,570,444	94,479,000	14,807,004	19,418,000	148,070,040	194,180,000
1831–1840	652,291	13,484,000	6,522,913	134,841,000	19,175,867	25,147,000	191,758,675	251,470,000
1841–1850	1,760,502	36,393,000	17,605,018	363,928,000	25,090,342	32,717,000	250,903,422	327,170,000
1851–1855	6,410,324	132,513,000	32,051,621	662,566,000	28,488,597	38,204,000	142,442,986	191,020,000
1856–1860	6,486,262	134,083,000	32,431,312	670,415,000	29,095,428	39,234,000	145,477,142	196,170,000
1861–1865	5,949,582	122,989,000	29,747,913	614,944,000	35,401,972	47,475,000	177,009,862	237.375,000
1866–1870	6,270,086	129,614,000	31,350,430	648,071,000	43,051,583	57,095,000	215,257,914	285,475,000
1871–1872	5,591,014	115,577,000	11,182,028	231,154,000	63,317,014	82,095,000	126,634,028	164,190,000
Total........	....	....	289,542,354	$5,985,373,000	....	....	5,623,751,944	$8,082,417,000

No. 9.— PRODUCTION OF GOLD AND SILVER IN THE WORLD, 1493–1896.

[The aggregate production of 1493 to 1872 is obtained from estimates by Dr. Adolph Soetbeer. Since 1872 the estimates are those of the Bureau of the Mint.]

Calendar year	Gold		Silver	
	Fine ounces	Value	Fine ounces	Commercial value
1493–1872....	289,542,354	$5,985,373,000	5,623,751,944	$ 8,082,417,000
1873.........	4,653,675	96,200,000	63,267,187	82,120,800
1874.........	4,390,031	90,750,000	55,300,781	70,674,400
1875.........	4,716,563	97,500,000	62,261,719	77,578,100
1876.........	5,016,488	103,700,000	67,753,125	78,322,600
1877.........	5,512,196	113,947,200	62,679,916	75,278,600
1878.........	5,761,114	119,092,800	73,385,451	84,540,000
1879.........	5,262,174	108,778,800	74,383,495	83,532,700
1880.........	5,148,880	106,436,800	74,795,273	85,640,600
1881.........	4,983,742	103,023,100	79,020,872	89,925,700
1882.........	4,934,086	101,996,600	86,472,091	98,232,300
1883.........	4,614,588	95,392,000	89,175,023	98,984,300
1884.........	4,921,169	101,729,600	81,567,801	90,785,000
1885.........	5,245,572	108,435,600	91,609,959	97,518,800
1886.........	5,135,679	106,163,900	93,297,290	92,793,500
1887.........	5,116,861	105,774,900	96,123,586	94,031,000
1888.........	5,330,775	110,196,900	108,827,606	102,185,900
1889.........	5,973,790	123,489,200	120,213,611	112,414,100
1890.........	5,749,306	118,848,700	126,095,062	131,937,000
1891.........	6,320,194	130,650,000	137,170,919	135,500,200
1892.........	7,094,266	146,651,500	153,151,762	133,404,400
1893.........	7,618,811	157,494,800	165,472,621	120,119,900
1894.........	8,764,362	181,175,600	164,610,394	104,493,000
1895.........	9,641,337	199,304,100	167,288,729	109,406,800
1896.........	9,817,991	202,956,000	165,100,887	111,278,000
Total	141,723,650	$2,929,688,100	2,459,025,160	$ 2,369,697,700
Grand Total	431,266,004	$8,915,061,100	8,082,777,104	$10,452,114,700

No. 10.—SILVER PURCHASES UNDER ACTS OF FEB. 28, 1878, AND JULY 14, 1890.

[Annual Report Director of the Mint, 1897, pp. 15, 16.]

Fiscal Year	Fine Ounces	Cost	Average Price per Fine Ounce	Bullion Value of a Silver Dollar
1878............	10,809,350.58	$13,023,268.96	$1.2048	$0.9318
1879............	19,248,086.09	21,593,642.99	1.1218	.8676
1880............	22,057,862.64	25,235,081.53	1.1440	.8848
1881............	19,709,227.11	22,327,874.75	1.1328	.8761
1882............	21,190,200.87	24,054,480.47	1.1351	.8779
1883............	22,889,241.24	25,577,327.58	1.1174	.8642
1884............	21,922,951.52	24,378,383.91	1.1120	.8600
1885............	21,791,171.61	23,747,460.25	1.0897	.8428
1886............	22,690,652.94	23,448,960.01	1.0334	.7992
1887............	26,490,008.04	25,988,620.46	.9810	.7587
1888............	25,386,125.32	24,237,553.20	.9547	.7384
1889............	26,468,861.03	24,717,853.81	.9338	.7222
1890............	27,820,900.05	26,899,326.33	.9668	.7477
1891............	2,797,379.52	3,049,426.46	1.0901	.8431
***....	291,272,018.56	$308,279,260.71	$1.0583	$0.8185
1891............	48,393,113.05	$50,577,498.44	$1.0451	$0.8083
1892............	54,355,748.10	51,106,607.96	.9402	.7271
1893............	54,008,162.60	45,531,374.53	.8430	.6520
1894............	11,917,658.78	8,715,521.32	.7313	.5656
†††....	168,674,682.53	$155,931,002.25	$0.9244	$0.7150
Grand total....	459,946,701.09	$464,210,262.96	$1.0093	$0.7806

*** Silver purchased under act of Feb. 28, 1878. ††† Silver purchased under act of July 14, 1890.

No. 11.—RATIOS AND PRICE OF SILVER, BULLION VALUE OF SILVER DOLLAR, ETC. 1833–1897.

Calendar year	London quotations			Value of a fine ounce at average quotation	Average annual ratio of silver to gold	Average bullion value of silver dollar [1]
	Lowest	Highest	Average			
1833	$58\frac{3}{4}d$	$59\frac{7}{8}d$	$59\frac{3}{16}d$	\$1.297	15.93	\$1.003
1834	$59\frac{3}{4}$	$60\frac{3}{4}$	$59\frac{15}{16}$	1.313	15.73	1.015
1835	$59\frac{1}{4}$	60	$59\frac{11}{16}$	1.308	15.80	1.012
1836	$59\frac{5}{8}$	$60\frac{3}{8}$	60	1.315	15.72	1.017
1837	59	$60\frac{3}{8}$	$59\frac{9}{16}$	1.305	15.83	1.010
1838	$59\frac{1}{2}$	$60\frac{1}{8}$	$59\frac{1}{2}$	1.304	15.85	1.009
1839	60	$60\frac{5}{8}$	$60\frac{3}{8}$	1.323	15.62	1.023
1840	$60\frac{1}{8}$	$60\frac{3}{4}$	$60\frac{3}{8}$	1.323	15.62	1.023
1841	$59\frac{3}{4}$	$60\frac{3}{8}$	$60\frac{1}{16}$	1.316	15.70	1.017
1842	$59\frac{1}{4}$	60	$59\frac{7}{16}$	1.303	15.87	1.008
1843	59	$59\frac{5}{8}$	$59\frac{3}{16}$	1.297	15.93	1.003
1844	$59\frac{1}{4}$	$59\frac{3}{4}$	$59\frac{1}{2}$	1.304	15.85	1.009
1845	$58\frac{7}{8}$	$59\frac{7}{8}$	$59\frac{1}{4}$	1.298	15.92	1.003
1846	59	$60\frac{1}{8}$	$59\frac{5}{16}$	1.300	15.90	1.005
1847	$58\frac{7}{8}$	$60\frac{3}{8}$	$59\frac{11}{16}$	1.308	15.80	1.012
1848	$58\frac{1}{2}$	60	$59\frac{1}{2}$	1.301	15.85	1.009
1849	$59\frac{1}{2}$	60	$59\frac{3}{4}$	1.309	15.78	1.013
1850	$59\frac{1}{2}$	$61\frac{1}{2}$	$61\frac{1}{16}$	1.316	15.70	1.017
1851	60	$61\frac{5}{8}$	61	1.337	15.46	1.034
1852	$59\frac{7}{8}$	$61\frac{7}{8}$	$60\frac{1}{2}$	1.326	15.59	1.026
1853	$60\frac{5}{8}$	$61\frac{7}{8}$	$61\frac{1}{2}$	1.348	15.33	1.043
1854	$60\frac{7}{8}$	$61\frac{7}{8}$	$61\frac{1}{2}$	1.348	15.33	1.013
1855	60	$61\frac{5}{8}$	$61\frac{5}{16}$	1.344	15.38	1.039
1856	$60\frac{1}{2}$	$62\frac{1}{4}$	$61\frac{5}{16}$	1.344	15.38	1.039
1857	61	$62\frac{3}{8}$	$61\frac{3}{4}$	1.353	15.27	1.047
1858	$60\frac{3}{4}$	$61\frac{7}{8}$	$61\frac{5}{16}$	1.344	15.38	1.039
1859	$61\frac{3}{4}$	$62\frac{3}{4}$	$62\frac{1}{16}$	1.360	15.19	1.052
1860	$61\frac{1}{4}$	$62\frac{3}{8}$	$61\frac{11}{16}$	1.352	15.29	1.046
1861	$60\frac{1}{8}$	$61\frac{3}{8}$	$60\frac{13}{16}$	1.333	15.50	1.031
1862	61	$62\frac{1}{8}$	$61\frac{7}{16}$	1.346	15.35	1.042
1863	61	$61\frac{3}{4}$	$61\frac{3}{8}$	1.345	15.37	1.040
1864	$60\frac{5}{8}$	$62\frac{1}{2}$	$61\frac{3}{8}$	1.345	15.37	1.040
1865	$60\frac{1}{2}$	$61\frac{5}{8}$	$61\frac{1}{16}$	1.338	15.44	1.035
1866	$60\frac{3}{4}$	$62\frac{1}{4}$	$61\frac{1}{8}$	1.339	15.43	1.036
1867	$60\frac{3}{4}$	$61\frac{1}{4}$	$60\frac{9}{16}$	1.328	15.57	1.027
1868	$60\frac{1}{8}$	$61\frac{1}{8}$	$60\frac{1}{2}$	1.326	15.59	1.026
1869	60	61	$60\frac{7}{16}$	1.325	15.60	1.025
1870	$60\frac{1}{4}$	$60\frac{3}{4}$	$60\frac{9}{16}$	1.326	15.57	1.027
1871	$60\frac{3}{16}$	61	$60\frac{1}{2}$	1.328	15.59	1.026
1872	$59\frac{1}{4}$	$61\frac{1}{8}$	$60\frac{5}{16}$	1.322	15.63	1.023
1873	$57\frac{7}{8}$	$59\frac{15}{16}$	$59\frac{1}{4}$	1.298	15.92	1.004
1874	$57\frac{1}{4}$	$59\frac{1}{2}$	$58\frac{5}{16}$	1.278	16.19	.998
1875	$55\frac{1}{2}$	$57\frac{5}{8}$	$56\frac{7}{8}$	1.246	16.59	.964
1876	$46\frac{3}{4}$	$58\frac{1}{2}$	$52\frac{3}{4}$	1.156	17.88	.894
1877	$53\frac{1}{4}$	$58\frac{1}{4}$	$54\frac{13}{16}$	1.201	17.22	.929
1878	$49\frac{1}{2}$	$55\frac{1}{4}$	$52\frac{9}{16}$	1.152	17.94	.891
1879	$48\frac{7}{8}$	$53\frac{3}{4}$	$51\frac{1}{4}$	1.123	18.40	.868
1880	$51\frac{3}{8}$	$52\frac{7}{8}$	$52\frac{1}{2}$	1.145	18.05	.886
1881	$50\frac{7}{8}$	$52\frac{7}{8}$	$51\frac{15}{16}$	1.138	18.16	.881

[1] Down to 1880 the figures for silver prices are based on Pixley and Abell's tables, since that date on daily cablegrams from London to the director of the mint.

No. 11.—RATIOS AND PRICE OF SILVER, BULLION VALUE OF SILVER DOLLAR, ETC. 1833–1897—*Continued.*

Calendar year	London quotations			Value of fine ounce at average quotation	Average annual ratio of silver to gold	Average bullion value of silver dollar
	Lowest	Highest	Average			
1882	$50\ d$	$52\frac{3}{8}\ d$	$51\frac{13}{16}\ d$	$1.136	18.19	$ .878
1883	50	$51\frac{3}{16}$	$50\frac{5}{8}$	1.110	18.64	.858
1884	$49\frac{1}{2}$	$51\frac{3}{8}$	$50\frac{3}{4}$	1.113	18.57	.861
1885	$46\frac{7}{8}$	50	$48\frac{9}{16}$	1.0645	19.41	.823
1886	42	47	$45\frac{3}{8}$	.9946	20.78	.769
1887	$43\frac{1}{4}$	$47\frac{1}{8}$	$44\frac{5}{8}$	.97823	21.13	.756
1888	$41\frac{5}{8}$	$44\frac{9}{16}$	$42\frac{7}{8}$	.93974	21.99	.727
1889	42	$44\frac{3}{8}$	$41\frac{11}{16}$	.93512	22.10	.723
1890	$43\frac{5}{8}$	$54\frac{5}{8}$	$47\frac{3}{4}$	1.04633	19.76	.809
1891	$43\frac{1}{2}$	$48\frac{3}{4}$	$45\frac{1}{16}$	.98782	20.92	.764
1892	$37\frac{7}{8}$	$43\frac{3}{4}$	$39\frac{3}{4}$	.87106	23.72	.673
1893	$30\frac{1}{2}$	$38\frac{3}{4}$	$35\frac{9}{16}$	.78031	26.49	.603
1894	27	$31\frac{3}{4}$	$28\frac{7}{8}$	.63479	32.56	.491
1895	$27\frac{3}{16}$	$31\frac{3}{8}$	$29\frac{7}{8}$	.65406	31.60	.505
1896	$29\frac{3}{4}$	$31\frac{15}{16}$	$30\frac{3}{4}$	.67437	30.66	.522
1897	$23\frac{5}{8}$	$29\frac{13}{16}$	$27\frac{9}{16}$	.60449	34.28	.468

No. 12.—COMMERCIAL RATIO OF SILVER TO GOLD EACH YEAR SINCE 1687.

(From 1687 to 1832 the ratios are taken from Dr. A. Soetbeer; from 1833 to 1844 from Pixley and Abell's tables.

Year	Ratio	Year	Ratio	Year	Ratio	Year	Ratio	Year	Ratio
1687	14.94	1719	15.09	1751	14.39	1783	14.48	1815	15.26
1688	14.94	1720	15.04	1752	14.54	1784	14.70	1816	15.28
1689	15.02	1721	15.05	1753	14.54	1785	14.92	1817	15.11
1690	15.02	1722	15.17	1754	14.48	1786	14.96	1818	15.35
1691	14.98	1723	15.20	1755	14.68	1787	14.92	1819	15.33
1692	14.92	1724	15.11	1756	14.94	1788	14.65	1820	15.62
1693	14.83	1725	15.11	1757	14.87	1789	14.75	1821	15.95
1694	14.87	1726	15.15	1758	14.85	1790	15.04	1822	15.80
1695	15.02	1727	15.24	1759	14.15	1791	15.05	1823	15.84
1696	15.00	1728	15.11	1760	14.14	1792	15.17	1824	15.82
1697	15.20	1729	14.92	1761	14.54	1793	15.00	1825	15.70
1698	15.07	1730	14.81	1762	15.27	1794	15.37	1826	15.76
1699	14.94	1731	14.94	1763	14.99	1795	15.55	1827	15.74
1700	14.81	1732	15.09	1764	14.70	1796	15.65	1828	15.78
1701	15.07	1733	15.18	1765	14.83	1797	15.41	1829	15.78
1702	15.52	1734	15.39	1766	14.80	1798	15.59	1830	15.82
1703	15.17	1735	15.41	1767	14.85	1799	15.74	1831	15.72
1704	15.22	1736	15.18	1768	14.80	1800	15.68	1832	15.73
1705	15.11	1737	15.02	1769	14.72	1801	15.46	1833	15.93
1706	15.27	1738	14.91	1770	14.62	1802	15.26	1834	15.73
1707	15.44	1739	14.91	1771	14.66	1803	15.41	1835	15.80
1708	15.41	1740	14.94	1772	14.52	1804	15.41	1836	15.72
1709	15.31	1741	14.92	1773	14.62	1805	15.79	1837	15.83
1710	15.22	1742	14.85	1774	14.62	1806	15.52	1838	15.85
1711	15.29	1743	14.85	1775	14.72	1807	15.43	1839	15.62
1712	15.31	1744	14.87	1776	14.55	1808	16.08	1040	15.62
1713	15.24	1745	14.98	1777	14.54	1809	15.96	1841	15.70
1714	15.13	1746	15.13	1778	14.68	1810	15.77	1842	15.87
1715	15.11	1747	15.26	1779	14.80	1811	15.53	1843	15.93
1716	15.09	1748	15.11	1780	14 72	1812	16.11	1844	15.85
1717	15.13	1749	14.80	1781	14.78	1813	16.25		
1718	15.11	1750	14.55	1782	14.42	1814	15.04		

No. 13.—RATIO OF SILVER TO GOLD, MONTHLY, SINCE 1844.

Year	Jan.	Feb.	Mch.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual Average
1845	15.85	15.92	15.95	16.05	16.22	15.98	15.95	15.88	15.88	15.82	15.80	15.92	15.93
1846	15.90	15.92	15.92	15.95	15.98	15.98	15.97	15.95	15.95	15.92	15.73	15.68	15.91
1847	15.68	15.62	15.62	15.65	15.98	15.97	15.92	15.73	15.78	15.92	15.95	15.95	15.82
1848	15.95	15.90	15.93	15.95	15.97	15.85	15.85	15.77	15.78	15.77	15.83	15.85	15.87
1849	15.97	15.78	15.92	15.75	15.75	15.82	15.82	15.77	15.80	15.88	15.85	15.85	15.81
1850	15.82	15.82	15.82	15.82	15.82	15.82	15.78	15.73	15.72	15.65	15.52	15.33	15.72
1851	15.30	15.32	15.33	15.33	15.43	15.43	15.52	15.49	15.57	15.65	15.62	15.52	15.46
1852	15.52	15.59	15.62	15.68	15.75	15.73	15.64	15.62	15.62	15.49	15.32	15.35	15.58
1853	15.36	15.38	15.36	15.36	15.41	15.46	15.35	15.30	15.21	15.40	15.14	15.27	15.33
1854	15.27	15.29	15.26	15.26	15.27	15.36	15.36	15.40	15.36	15.40	15.36	15.32	15.33
1855	15.33	15.32	15.36	15.52	15.43	15.33	15.33	15.33	15.29	15.36	15.41	15.36	15.36
1856	15.40	15.38	15.47	15.46	15.43	15.43	15.40	15.35	15.24	15.21	15.15	15.18	15.34
1857	15.19	15.24	15.27	15.27	15.33	15.26	15.29	15.24	15.32	15.26	15.29	15.26	15.27
1858	15.35	15.27	15.32	15.36	15.33	15.33	15.44	15.47	15.51	15.40	15.29	15.30	15.36
1859	15.24	15.27	15.26	15.18	15.12	15.19	15.13	15.21	15.27	15.21	15.21	15.21	15.21
1860	15.18	15.19	15.18	15.29	15.30	15.40	15.44	15.36	15.30	15.29	15.32	15.35	15.30
1861	15.38	15.41	15.24	15.44	15.43	15.57	15.67	15.64	15.57	15.52	15.47	15.43	15.48
1862	15.35	15.32	15.38	15.41	15.40	15.33	15.46	15.41	15.38	15.33	15.21	15.29	15.36
1863	15.29	15.33	15.33	15.43	15.38	15.35	15.44	15.46	15.43	15.38	15.35	15.35	15.38
1864	15.23	15.33	15.33	15.54	15.46	15.40	15.41	15.38	15.33	15.46	15.47	15.39	15.39
1865	15.33	15.35	15.41	15.54	15.54	15.57	15.55	15.54	15.51	15.44	15.10	15.32	15.43
1866	15.32	15.43	15.47	15.65	15.32	15.19	15.35	15.57	15.51	15.46	15.47	15.49	15.44
1867	15.49	15.53	15.52	15.46	15.55	15.59	15.59	15.60	15.63	15.61	15.66	15.61	15.57
1868	15.62	15.59	15.54	15.55	15.59	15.62	15.61	15.64	15.66	15.64	15.59	15.54	15.61
1869	15.53	15.49	15.57	15.57	15.65	15.68	15.64	15.64	15.60	15.61	15.59	15.59	15.60
1870	15.57	15.60	15.59	15.61	15.60	15.60	15.45	15.59	15.62	15.59	15.56	15.58	15.60
1871	15.57	15.58	15.61	15.66	15.66	15.63	15.57	15.54	15.52	15.60	15.50	15.52	15.58
1872	15.50	15.45	15.51	15.57	15.68	15.70	15.68	15.68	15.61	15.70	15.85	15.79	15.64
1873	15.75	15.75	15.75	15.78	15.82	15.88	15.90	15.96	16.00	16.05	16.26	16.25	15.93
1874	16.05	16.05	16.00	16.01	16.06	16.06	16.15	16.26	16.32	16.33	16.26	16.40	16.16
1875	16.38	16.42	16.51	16.47	16.61	16.74	16.90	16.76	16.63	16.56	16.61	16.74	16.63
1876	16.98	17.38	17.67	17.55	17.80	17.24	19.59	18.07	18.21	17.96	17.50	16.65	17.80
1877	16.35	16.54	17.16	17.40	17.42	17.59	17.44	17.42	17.32	17.13	17.30	17.20	17.19
1878	17.53	17.38	17.30	17.44	17.62	17.76	17.92	17.97	18.33	18.71	18.65	18.87	17.96
1879	18.84	18.88	19.03	18.97	18.47	18.18	18.18	18.29	18.29	18.11	17.66	17.94	18.39
1880	17.96	18.05	18.14	18.13	18.09	17.97	17.90	17.90	18.02	18.11	18.22	18.19	18.06
1881	18.36	18.12	17.99	18.11	18.22	18.37	18.27	18.29	18.23	18.15	18.16	18.18	18.24
1882	18.15	18.12	18.15	18.07	18.04	18.09	18.20	18.15	18.17	18.23	18.38	18.70	18.27
1883	18.76	18.60	18.50	18.64	18.78	18.71	18.71	18.66	18.57	18.51	18.59	18.58	18.65
1884	18.54	18.42	18.51	18.58	18.55	18.57	18.57	18.59	18.58	18.62	18.84	18.98	18.63
1885	18.98	19.17	19.21	19.10	19.05	19.22	19.17	19.32	19.72	19.88	19.88	19.98	19.39
1886	20.20	20.22	20.17	20.33	20.75	20.04	21.65	22.29	21.52	20.86	20.30	20.64	20.78
1887	20.17	20.21	20.78	21.47	21.63	21.44	21.35	21.07	21.08	21.29	21.53	21.20	21.11
1888	21.23	21.43	21.74	22.09	22.38	22.38	22.37	22.44	21.87	21.87	21.93	21.14	21.99
1889	22.17	22.12	22.15	22.35	22.40	22.40	22.37	22.24	22.17	21.90	21.93	21.40	22.10
1890	21.19	21.36	21.40	20.53	20.17	19.75	19.54	17.26	18.03	18.09	20.12	19.50	19.77
1891	19.72	20.67	20.75	21.22	21.10	20.90	20.50	20.68	20.94	21.18	21.77	21.49	20.92
1892	22.05	22.71	23.39	23.76	23.56	23.23	23.78	24.51	24.67	24.26	24.18	24.45	23.68
1893	24.59	24.57	24.84	24.71	24.75	27.23	28.20	27.91	27.58	28.74	29.35	29.44	26.70
1894	30.30	32.41	34.36	32.24	32.90	32.94	32.62	31.86	31.73	32.24	32.69	33.87	32.58
1895	34.53	34.33	32.87	31.04	30.88	30.98	31.01	31.01	30.91	30.42	30.61	31.06	31.57
1896	30.73	30.27	30.09	30.42	30.33	30.06	30.00	30.54	31.08	31.40	31.47	32.07	30.67
1897	31.72	31.73	32.55	33.28	33.95	34.19	34.47	37.76	36.61	34.74	35.17	35.18	34.28

Computed to 1880 by Dr. O. J. Broch. See Report of International Monetary Conference of 1881. From 1881 to September, 1886, Appendix to Final Report of Royal Gold and Silver Commission, p. 160. From 1886 to 1896, computed from quotations given in Pixley & Abell's tables. For 1897, from quotations furnished by the Director of the Mint.

No. 14.—RATIO OF SILVER TO GOLD AND VALUE OF THE PURE SILVER IN A SILVER DOLLAR AT VARIOUS PRICES OF SILVER.

Price of silver per fine ounce	Ratio of silver to gold	Value of pure silver in a silver dollar	Price of silver per fine ounce	Ratio of silver to gold	Value of pure silver in a silver dollar	Price of silver per fine ounce	Ratio of silver to gold	Value of pure silver in a silver dollar
$0.50	41.34	$0.387	$0.77	26.85	$0.596	$1.04	19.88	$0.804
.51	40.53	.394	.78	26.51	.603	1.05	19.69	.812
.52	39.75	.402	.79	26.17	.611	1.06	19.50	.820
.53	39.00	.410	.80	25.84	.619	1.07	19.32	.828
.54	38.28	.418	.81	25.52	.626	1.08	19.14	.835
.55	37.58	.425	.82	25.21	.634	1.09	18.96	.843
.56	36.91	.433	.83	24.91	.642	1.10	18.79	.851
.57	36.27	.441	.84	24.61	.650	1.11	18.62	.865
.58	35.64	.449	.85	24.32	.657	1.12	18.46	.866
.59	35.04	.456	.86	24.04	.665	1.13	18.29	.874
.60	34.45	.464	.87	23.76	.673	1.14	18.13	.882
.61	33.89	.472	.88	23.49	.681	1.15	17.97	.889
.62	33.34	.480	.89	23.23	.688	1.16	17.82	.897
.63	32.81	.487	.90	22.97	.696	1.17	17.67	.905
.64	32.30	.495	.91	22.72	.704	1.18	17.52	.913
.65	31.80	.503	.92	22.47	.712	1.19	17.37	.920
.66	31.32	.510	.93	22.23	.719	1.20	17.23	.928
.67	30.85	.518	.94	21.99	.727	1.21	17.08	.936
.68	30.40	.526	.95	21.76	.735	1.22	16.94	.944
.69	29.96	.534	.96	21.53	.742	1.23	16.80	.951
.70	29.53	.541	.97	21.31	.750	1.24	16.67	.959
.71	29.12	.549	.98	21.09	.758	1.25	16.54	.967
.72	28.71	.557	.99	20.88	.766	1.26	16.41	.975
.73	28.32	.565	1.00	20.67	.773	1.27	16.28	.982
.74	27.93	.572	1.01	20.47	.781	1.28	16.15	.990
.75	27.56	.580	1.02	20.27	.789	1.29	16.02	.998
.76	27.20	.588	1.03	20.07	.797	*1.2929	15.988	1.00

No. 15.— VALUE OF AN OUNCE OF FINE SILVER AT VARIOUS RATIOS.

Ratio	Value of an ounce of fine silver	Ratio	Value of an ounce of fine silver	Ratio	Value of an ounce of fine silver
1 to 15	$1.3780	1 to 23½	$0.8796	1 to 32½	$0.6360
1 to 15½	1.3336	1 to 24	.8613	1 to 33	.6264
1 to 15.988*	1.2929	1 to 24½	.8437	1 to 33½	.6171
1 to 16	1.2919	1 to 25	.8268	1 to 34	.6080
1 to 16½	1.2527	1 to 25½	.8106	1 to 34½	.5992
1 to 17	1.2159	1 to 26	.7950	1 to 35	.5906
1 to 17½	1.1811	1 to 26½	.7800	1 to 35½	.5823
1 to 18	1.1483	1 to 27	.7656	1 to 36	.5742
1 to 18½	1.1173	1 to 27½	.7517	1 to 36½	.5663
1 to 19	1.0879	1 to 28	.7382	1 to 37	.5587
1 to 19½	1.0600	1 to 28½	.7253	1 to 37½	.5512
1 to 20	1.0335	1 to 29	.7109	1 to 38	.5439
1 to 20½	1.0083	1 to 29½	.7007	1 to 38½	.5369
1 to 21	.9843	1 to 30	.6890	1 to 39	.5300
1 to 21½	.9614	1 to 30½	.6777	1 to 39½	.5233
1 to 22	.9396	1 to 31	.6668	1 to 40	.5168
1 to 22½	.9187	1 to 31½	.6562	1 to 40½	.5104
1 to 23	.8987	1 to 32	.6459	1 to 41	.5042

* Parity at United States coinage ratio.

No. 16.—IMPORTS AXD EXPORTS OF GOLD AND SILVER COIN AND BULLION INTO AND FROM THE UNITED STATES.

[Finance and Commerce, Series 1897–8, p. 72.]

Year ending June 30	Gold Coin and Bullion				Silver Coin and Bullion		
	Imports	Exports	Excess of Imports over Exports	Excess of Exports over Imports	Imports	Exports	Excess of Exports over Imports
1864	$11,176,769	$100,661,634	....	$89,484,865	$ 1,938,843	$ 4,734,907	$ 2,796,064
1865	6,498,228	58,381,033	....	51,882,805	3,311,844	9,262,193	5,950,349
1866	8,196,261	71,197,309	....	63.001,048	2,503,831	14,846,762	12,342,931
1867	17,024,866	39,026,627	....	22,001,761	5,045,609	21,841,745	16,796,136
1868	8,737,443	72,396,344	....	63,658,901	5,450,925	21,387,758	15,936,833
1869	14,132,568	36,003,498	....	21,870,930	5,675,308	21,134,882	15,459,574
1870	12,056,950	33,635,962	....	21,579,012	14,362,229	24,519,704	10,157,475
1871	6,883,561	66,686,208	....	59,802,647	14,386,463	31,755,780	17,369,317
1872	8,717,458	49,548,760	....	40,831,302	5,026,231	30,328,774	25,302,543
1873	8,682,447	44,856,715	....	36,174,268	12,798,490	39,751,859	26,953,369
1874	19,503,137	34,042,420	....	14,539,283	8,951,769	32,587,985	23,636,216
1875	13,696,793	66,980,977	....	53,284,184	7,203,924	25,151,165	17,947,241
1876	7,992,709	31,177,050	....	23,184,341	7,943,972	25,329,252	17,385,280
1877	26,246,234	26,590,374	....	344,140	14,528,180	29,571,863	15,043,683
1878	13,330,215	9,204,445	$ 4,125,760	....	16,491,099	24,535,670	8,044,571
1879	5,624,948	4,587,614	1,037,334	....	14,671,052	20,409,827	5,738,775
1880	80,758,396	3,639,025	77,119,371	....	12,275,914	13,503,894	1,227,980
1881	100,031,259	2,565,132	97,466,127	....	10,544,238	16,841,715	6,297,477
1882	34,377,054	32,587,880	1,789,174	....	8,095,336	16,829,599	8,734,263
1883	17,734,149	11,600,888	6,133,261	....	10,755,242	20,219,445	9,464,203
1884	22,831,317	41,081,957	....	18,250,640	14,594,945	26,051,426	11,456,481
1885	26,691,696	8,477,892	18,213,804	....	16,550,627	33,753,633	17,203,006
1886	20,743,349	42,952,191	....	22,208,842	17,850,307	29,511,219	11,660,912
1887	42,910,601	9,701,187	33,209,414	....	17,260,191	26,296,504	9,036,313
1888	43,934,317	18,376,234	25,558,083	....	15,403,669	28,037,949	12,634,280
1889	10,284,858	59,952,285	....	49,667,427	18,678,215	36,689,248	18,011,033
1890	12,943.342	17,274,491	....	4,331,149	21,032,984	34,873,929	13,840,945
1891	18,232,567	86,362,654	....	68,130,087	18,026,880	22,590,988	4,564,108
1892	49,699,454	50,195,327	....	495,873	19,955,086	32,810,559	12,855,473
1893	21,174,381	108,680,844	....	87,506,463	23,193,252	40,737,319	17,544,067
1894*	72,449,119	76,978,061	....	4,528,942	13,286,552	50,451,265	37,164,713
1895*	36,384,760	66,468,481	....	30,083,721	20,211,179	47,295,286	27,084,107
1896*	33,525,065	112,409,947	....	78,884,882	28,777,186	60,541,670	31,764,484
1897*	85,013,575	40,359,780	44,653,795	....	30,533,227	61,946,638	31,413,411

* Including gold and silver in ore.

Prior to 1864 the figures for domestic exports or imports of gold and silver cannot be given separately. The figures of total imports and exports for the years 1845-1863 will be found in any recent Report on Commerce and Navigation or Statistical Abstract. The Annual Report on Commerce and Navigation gives full details as to countries to and from which gold and silver are exported and imported.

No. 17.—COINAGE OF GOLD AND SILVER IN THE UNITED STATES BY PERIODS.

Period	Gold	Silver Coinage			Total Gold and Silver.
		Silver Dollars	Subsidiary Silver	Total Silver	
1793–1833, 41 yrs.	$11,825,890.00	$1,439,517 §	$34,835,560.90	$36,275,077.90	$48,100,967.90
1834–1852, 19 yrs.	224,962,920.00	1,113,483	41,853,293.60	42,966,776.60	267,929,696.60
1853–1873, 21 yrs.	615,325,627.50	5,478,238	62,769,805.80*	68,248,043.80	683,573,671.30
1874–1897, 24 yrs.	1,063,135,788.00	455,818,122	125,876,805.45†	581,694,927.45	1,644,830,715.45
Total	$1,915,250,225.50	463,849,360	265,335,465.75	729,184,825.75	2,644,435,051.25

§ Total coinage of silver dollars, 1793–1805; from 1806 to 1835 no silver dollars were coined.
* Including $1,225,000 trade dollars. † Including $34,740,924 trade dollars.

No. 18.—COINAGE OF THE MINTS OF THE UNITED STATES FROM THEIR ORGANIZATION, 1792, TO DECEMBER 31, 1897.

Denomination	Pieces	Value
GOLD		
Double eagles	67,843,440	$1,356,868,800.00
Eagles	28,105,056	281,050,560.00
Half eagles	45,478,617	227,393,085.00
Three-dollar pieces (coinage discontinued under act of September 26, 1890)	539,792	1,619,376.00
Quarter eagles	11,527,627	28,819,067.50
Dollars (coinage discontinued under act of September 26, 1890)	19,499,337	19,499,337.00
Total gold	172,993,867	1,915,250,225.50
SILVER		
Dollars (coinage discontinued, act of February 12, 1873, and resumed under act of February 28, 1878)	*463,849,360	463,849,360.00
Trade dollars	35,965,924	35,965,924.00
Half dollars	271,287,642	135,643,821.00
Half dollars, Columbian souvenir	5,002,105	2,501,052.50
Quarter dollars	217,358,816	54,339,704.00
Quarter dollars, Columbian souvenir	40,023	10,005.75
Twenty-cent pieces (coinage discontinued, act of May 2, 1878)	1,355,000	271,000.00
Dimes	304,417,519	30,441,651.90
Half-dimes (coinage discontinued, act of February 12, 1873)	97,604,388	4,880,219.40
Three-cent pieces (coinage discontinued, act of February 12, 1873)	42,736,240	1,282,087.20
Total silver	1,439,616,017	729,184,825.75
MINOR		
Five-cent pieces, nickel	311,326,149	15,516,307.45
Three-cent pieces, nickel (coinage discontinued, act of September 26, 1890.)	31,378,316	941,349.48
Two-cent pieces, bronze (coinage discontinued, act of February 12, 1873)	45,601,000	912,020.00
One-cent pieces, copper (coinage discontinued, act of February 21, 1857)	156,288,744	1,562,887.44
One-cent pieces, nickel (coinage discontinued, act of April 22, 1864)	200,772,000	2,007,720.00
One-cent pieces, bronze	874,257,085	8,742,570.85
Half-cent pieces, copper (coinage discontinued, act of February 21, 1857)	7,985,222	39,926.11
Total minor	1,626,608,516	29,722,781.33
Total coinage	3,239,218,402	2,674,157,832.58

*Silver-dollar coinage under act of:

April 2, 1792		$ 8,031,238
February 28, 1878	$378,166,793	
July 14, 1890	72,572,857	
March 3, 1891	5,078,472	
		455,818,122
Total		463,849,360

No. 19.—VALUE IN GOLD OF $100 IN CURRENCY IN THE NEW YORK MARKET, 1862–1878.

[Bureau of Statistics, " Finance, Commerce and Immigration," October 1895, page 518.]

Periods	1862	1863	1864	1865	1866	1867	1868	1869	1870	1871	1872	1873	1874	1875	1876	1877	1878
January	97.6	68.9	64.3	46.3	71.4	74.3	72.2	73.7	82.4	90.3	91.7	88.7	89.7	88.9	88.6	94.0	97.9
February	96.6	62.3	63.1	48.7	72.3	72.8	70.7	74.4	83.7	89.7	90.7	87.6	89.1	87.3	88.2	94.8	98.0
March	98.2	64.7	61.4	57.5	76.6	74.1	71.7	76.2	88.8	90.1	90.8	86.6	89.2	86.6	87.5	95.4	98.8
April	98.5	66.0	57.9	67.3	78.6	73.7	72.1	75.2	88.4	90.4	90.0	84.9	88.2	87.1	88.5	94.2	99.4
May	96.8	67.2	56.7	73.7	75.9	73.0	71.6	71.8	87.2	89.7	88.0	85.0	89.9	86.3	88.8	93.5	99.3
June	93.9	69.2	47.5	71.4	67.2	72.7	71.4	72.4	88.6	89.0	87.8	85.8	90.0	85.5	88.9	94.9	99.2
July	86.6	76.6	38.7	70.4	66.0	71.7	70.1	73.5	85.6	89.0	87.5	86.4	91.0	87.1	89.3	94.9	99.5
August	87.3	79.5	39.4	69.7	67.2	71.0	68.7	74.5	84.8	89.0	87.4	86.7	91.2	88.1	89.9	95.2	99.5
September	84.4	74.5	44.9	69.5	68.7	69.7	69.6	73.1	87.1	87.3	88.1	88.7	91.2	86.4	90.9	96.8	99.6
October	77.8	67.7	48.3	68.7	67.4	69.7	72.9	76.8	88.7	88.3	88.3	91.8	91.0	85.9	91.2	97.3	99.5
November	76.3	67.6	42.8	68.0	69.5	71.6	74.4	79.2	89.8	89.9	88.6	92.1	90.2	87.2	91.7	97.3	99.8
December	75.6	66.2	44.0	68.4	73.2	74.2	74.0	82.3	90.3	91.5	89.1	90.9	89.6	87.8	92.6	97.3	99.9
First quarter year	97.5	65.2	62.9	50.4	73.3	73.7	71.5	74.7	84.9	90.0	91.0	87.6	89.3	87.6	88.1	94.8	98.2
Second quarter year	96.3	67.4	53.6	70.7	73.6	73.2	71.7	73.2	88.0	89.7	88.6	85.3	89.0	86.3	88.7	94.2	99.3
Third quarter year	86.1	76.8	40.8	69.8	67.2	70.8	69.5	73.7	85.8	88.4	87.6	87.3	91.1	87.2	90.1	95.6	99.5
Fourth quarter year	76.6	67.2	44.9	68.4	70.0	71.8	73.7	79.4	89.6	90.0	88.7	91.6	90.2	86.9	91.8	97.3	99.7
First half year	96.9	66.3	57.9	58.9	73.5	73.4	71.6	73.9	86.4	89.8	89.8	86.4	89.2	86.9	88.4	94.4	98.8
Second half year	81.0	71.6	42.8	69.1	68.6	71.3	71.5	76.5	87.7	89.2	88.2	89.4	90.7	87.1	90.9	96.4	99.6
Calendar year	88.3	68.9	49.2	63.6	71.0	72.4	71.6	75.2	87.0	89.5	89.0	87.9	89.9	87.0	89.8	95.4	99.2
Fiscal year ended June 30	98.4	72.9	64.0	49.5	71.2	70.9	71.5	72.7	81.1	88.7	89.4	87.3	89.3	88.8	87.8	92.7	97.5

The monthly figures are derived from averages of daily quotations of gold, each of which is the mean of four: the opening, highest, lowest, and closing prices in New York.

No. 20.—REDEMPTIONS IN GOLD OF UNITED STATES NOTES AND TREASURY NOTES AND EXPORTS OF GOLD BY FISCAL YEARS 1879–1897.

[Finance Report, 1897, p. 140.]

Fiscal year	United States notes	Treasury notes of 1890	Total	Exports of gold
1879	$7,976,698	.....	$7,976,698	$4,557,614
1880	3,780,638	.....	3,780,638	3,639,025
1881	271,750	.....	271,750	2,565,132
1882	40,000	.....	40,000	32,587,880
1883	75,000	.....	75,000	11,600,888
1884	590,000	.....	590,000	41,081,957
1885	2,222,000	.....	2,222,000	8,477,892
1886	6,863,699	.....	6,863,699	42,952,191
1887	4,224,073	.....	4,224,073	9,701,187
1888	692,596	.....	692,596	18,376,234
1889	730,143	.....	730,143	59,952,285
1890	732,386	.....	732,386	17,274,491
1891	5,986,070	.....	5,986,070	86,362,654
1892	5,352,243	$3,773,600	9,125,843	50,195,327
1893	55,319,125	46,781,220	102,100,345	108,680,844
1894	68,242,408	16,599,742	84,842,150	76,978,061
1895	109,783,800	7,570,398	117,354,198	66,468,481
1896	153,307,591	5,348,365	158,655,956	112,409,947
1897	68,372,923	9,828,991	78,201,914	40,357,780
Total	494,563,143	89,902,316	584,465,459	794,249,820

No. 21.—REDEMPTIONS IN GOLD OF UNITED STATES NOTES AND TREASURY NOTES BY MONTHS, JANUARY 1892 TO DECEMBER 1897.

[Finance Report, 1897, p. 139.]

Month	United States notes	Treasury notes of 1890	Total	Month	United States notes	Treasury notes of 1890	Total
1892—Jan	$152,093	$159,960	$312,053	1895—Jan	$43,415,283	$1,702,455	$45,117,738
Feb.	205,830	270,370	476,200	Feb	4,784,907	776,045	5,560,952
Mar.	476,401	256,330	732,731	Mar	809,495	279,590	1,089,085
Apr.	438,156	258,570	696,726	Apr	733,525	284,046	1,017,571
May	334,823	287,300	622,123	May	734,747	431,745	1,166,492
June	568,326	1,854,200	2,422,526	June	644,621	401,575	1,046,196
July	4,086,055	5,148,650	9,234,705	July	3,122,620	704,175	3,826,795
Aug.	1,049,414	5,091,460	6,140,874	Aug	16,218,815	345,252	16,564,067
Sept	2,264,089	1,823,710	4,087,799	Sept	17,119,814	257,670	17,377,484
Oct	282,665	316,200	598,865	Oct.	1,849,018	317,865	2,166,883
Nov.	406,206	291,940	698,146	Nov.	15,616,190	418,400	16,034,590
Dec	5,699,755	4,538,057	10,237,812	Dec	19,787,951	424,744	20,212,695
1893—Jan	6,359,126	5,137,491	11,496,617	1896—Jan	15,686,024	762,484	16,448,508
Feb.	5,811,299	8,017,365	13,828,664	Feb	21,080,551	656,325	21,736,876
Mar	1,641,923	3,284,530	4,926,453	Mar.	6,381,296	475,250	6,856,546
Apr.	12,568,555	7,483,355	20,051,910	Apr	6,754,718	375,900	7,130,618
May	12,076,934	4,470,915	16,547,849	May	21,726,600	312,947	22,039,547
June	3,073,104	1,177,547	4,250,651	June	7,963,994	297,353	8,261,347
July	771,935	264,080	1,036,015	July	16,275,406	1,009,672	17,285,078
Aug.	1,189,757	1,158,465	2,348,222	Aug	11,388,806	980,919	12,369,725
Sept	143,592	197,135	340,727	Sept	3,436,733	1,224,713	4,661,446
Oct.	262,512	432,880	695,392	Oct.	9,906,832	2,167,003	12,073,835
Nov.	299,252	217,120	516,372	Nov	3,137,149	925,261	4,062,410
Dec	295,523	221,895	517,418	Dec	858,444	273,402	1,131,846
1894—Jan	118,841	237,515	356,356	1897—Jan	594,412	351,656	946,068
Feb.	10,982,624	8,210,730	19,193,354	Feb	521,355	402,769	924,124
Mar.	2,266,426	1,194,766	3,461,192	Mar.	679,382	569,947	1,249,329
Apr.	6,072,042	1,594,085	7,666,127	Apr.	6,934,575	567,433	7,502,008
May	25,131,412	1,409,670	26,541,082	May	8,044,965	837,635	8,882,600
June	20,708,492	1,461,401	22,169,893	June	6,594,864	518,581	7,113,445
July	13,367,864	555,511	13,923,375	July	5,072,208	202,935	5,275,143
Aug.	4,209,853	531,560	4,741,413	Aug	2,875,606	240,670	3,116,276
Sept	636,031	300,487	936,518	Sept	2,598,140	144,033	2,742,173
Oct	2,542,719	505,171	3,047,890	Oct.	2,484,182	191,338	2,675,520
Nov.	7,085,133	714,614	7,799,747	Nov.	1,812,909	321,145	2,134,054
Dec	30,819,622	1,087,599	31,907,221	Dec	1,980,396	197,220	2,177,616

No. 22.—NET GOLD RESERVE AND NET CASH BALANCE IN THE TREASURY AT THE END OF EACH MONTH FROM JANUARY 1893.[1]

	Total gold in Treasury—coin and bullion	Gold certificates in circulation	Net gold in the Treasury	Net U. S. notes and treasury notes in Treasury	Net cash balance in Treasury
1893					
January	$228,827,532	$120,645,819	$108,181,713	$ 16,556,021	$125,265,067
February	217,672,948	114,388,729	103,284,219	18,676,514	124,128,089
March	218,378,233	111,486,009	106,892,224	19,751,069	125,630,728
April	202,283,359	105,272,029	97,011,330	21,324,574	121,482,903
May	196,518,610	101,469,969	95,048,641	21,388,384	121,565,155
June	188,455,433	92,970,019	95,485,414	20,398,866	122,462,290
July	186,813,962	87,611,029	99,202,933	18,943,822	117,887,566
August	176,423,172	80,414,049	96,009,123	13,899,705	107,283,910
September	173,209,771	79,627,599	93,582,172	8,746,951	106,875,632
October	163,274,172	78,889,309	84,384,863	4,380,594	102,294,291
November	161,122,128	78,163,079	82,959,049	4,890,567	95,199,616
December	158,303,779	77,412,179	80,891,600	6,289,086	90.375,555
1894					
January	142,665,594	77,015,419	65,650,175	4,682,696	84,082,098
February	177,462,797	70,935,729	106,527,068	17,227,906	138,662,364
March	176,456,045	70,306,909	106,149,136	14,953,122	133,950,026
April	170,192,458	69,990,449	100,202,009	16,754,286	125,097,787
May	148,067,816	69,374,549	78,693,267	29,445,979	117,854,335
June	131,217,434	66,344,409	64,873,025	36,696,053	117,584,437
July	120,922,836	65,947,229	54,975,607	42.950,390	119,065,351
August	120,885,869	65,668,969	55,216,900	52,439,842	127,148,096
September	123,665,756	64,790,439	58,875,317	53,756,428	119,919,718
October	125,613,896	64,252,069	61,361,827	40,586,483	107,340,146
November	164,350,468	58,925,899	105,424,569	39,039,691	144,507,606
December	139,606,354	53,361,909	86,244,445	63,284.108	153,337,579
1895					
January	97,353,776	52,647,809	44,705,967	85,627,989	144,603,302
February	138,593,280	51,507,769	87,085,511	84,223,215	178,197,587
March	139,486,496	48,843,189	90,643,307	81,792,746	187,917,260
April	139,998,154	48,751,009	91,247,145	69,736,082	180,817,916
May	147,690,978	48,539,569	99,151,469	61,587,457	185,370,101
June	155,893,932	48,381,569	107,512,363	56,276,252	195,240,153
July	155,354,066	48,117,579	107,236,487	49,897,588	187,149,532
August	149,410,926	49,081,089	100,329,837	57,647,881	184,039,157
September	143,557,513	50,645,539	92,911,974	79,107,454	185,405,365
October	143,360,839	50,417,659	92,943,180	77,520,347	179,947,999
November	129,567,945	50,233,979	79,333,966	90,156,477	177,406,386
December	113,198,707	49,936,439	63,262,268	106,264,654	178,027,200
1896					
January	99,693,357	49,847,849	49,845,508	99,113,271	171,591,780
February	167,695,999	43,733,019	123,962,980	104,042,173	262,707,007
March	171,885,710	43,239,249	128,646,461	112.284,848	271,641,748
April	168,446,459	43,052,559	125,393,900	108,549,890	270,090,662
May	151,307,143	42,961,909	108,345,234	120,993,035	267,193,210
June	144,020,364	42,320,759	101,699,605	123,855,577	267,432,097
July	150,012,225	39,293,479	110,718,746	102,125,226	256,158,473
August	139,825,200	38,867,639	100,957,561	111,800,038	243,346,401
September	162,771,311	38,736,639	124,034,672	98,868,949	241,154,457
October	155,323,833	38,197,309	117,126,524	96,535,206	233,572,763
November	169,527,102	38,016,749	131,510,353	75,034,912	225,357,100
December	175,203,983	37,887,439	137,316,544	70,628,317	228,320,382
1897					
January	182,387,122	37,586,629	144,800,493	48,509,678	215,362,421
February	186,206,028	37,544,819	148,661,209	41,425,059	212,837,256
March	189,242,803	37,456,339	151,786,464	50,593,849	222,045,606
April	190,762,889	37,421,999	153,340,890	53,480,533	228,090,518
May	181,707,391	37,387,829	144,319,562	61,188,187	230,113,813
June	178,076,657	37,285,919	140,790,738	67,929,521	240,137,627
July	178,044,578	37,226,879	140,817,699	64,306,457	233,016,458
August	181,234,165	37,017,789	144,216,376	58,500,670	218,561,207
September	184,561,664	36,898,559	147,663,105	63,578,689	215,192,788
October	190,387,257	36,814,109	153,573,148	46,952,343	207.756,099
November	194,089,260	36,725,409	157,363,851	38,974,898	220,663,560
December	197,469,236	36,557,689	160,911,547	43,789,433	235,474,769

[1] Corresponding figures for the end of each month from 1878 to 1892 inclusive can be found in the *Finance Report*, *1897*, tables 28, 29, and 31, at pp. 50–61.

No. 23.—PRINCIPAL ITEMS OF NATIONAL BANK STATEMENTS, 1863–1897.

About Oct. 1, each year	Number of banks	Capital	Surplus and undivided profits	Circulation *a*	Due to national banks	Due to other banks and bankers	Deposits *c*	Notes rediscounted	Bills payable	Other liabilities	Total liabilities
1863..	66	$ 7,188,393	$ 128,030	....	$ 981,178*	....	$ 8,497,682	....	....	$ 2,361	$ 16,797,644
1864..	508	86,782,802	7,992,678	$45,260,504	34,862,385*	....	122,166,537	....	....	43,290	297,108,196
1865..	1,513	393,157,206	71,063,659	171,321,903	90,044,837	$84,155,162†	549,081,254	....	....	944,054	1,359,768,075
1866..	1,644	415,472,369	85,952,764	280,253,818	110,531,957	26,986,318	598,017,554	....	....	*b* 9,748,025	1,526,962,805
1867..	1,642	420,073,415	100,447,033	293,887,941	93,111,241	19,644,941	568,212,337	....	....	*b* 4,092,153	1,499,469,060
1868..	1,643	420,634,511	114,091,645	295,769,489	99,414,397	23,720,829	603,084,550	....	....	*b* 2,906,352	1,559,621,773
1869..	1,617	426,399,151	126,852,635	293,593,645	95,067,893	23,849,372	523,029,491	$3,839,357	$2,140,363	*b* 2,454,697	1,497,226,605
1870..	1,615	430,399,301	132,670,058	291,798,640	100,348,292	29,693,911	515,228,299	3,843,578	4,592,610	*b* 2,138,548	1,510,713,237
1871..	1,767	458,255,696	143,121,386	315,519,117	131,730,713	40,211,972	631,314,216	3,964,553	4,528,191	*b* 1,921,056	1,730,566,899
1872..	1,919	479,629,174	156,881,301	333,495,027	110,047,348	33,789,084	628,858,027	5,549,432	6,040,563	*b* 1,567,143	1,755,857,098
1873..	1,976	491,072,616	174,829,631	339,081,799	133,672,733	39,298,148	640,015,999	5,987,512	5,480,554	*b* 1,188,853	1,830,627,846
1874..	2,004	493,765,121	180,442,544	333,225,298	125,102,050	50,718,008	683,815,255	4,197,372	4,950,728	*b* 964,567	1,877,180,942
1875..	2,088	504,829,769	187,321,030	318,350,379	129,810,682	49,918,531	679,361,881	5,254,454	6,590,234	*b* 772,348	1,882,209,308
1876..	2,089	499,802,232	178,647,498	291,544,020	131,535,969	48,250,112	666,237,499	4,464,408	6,154,784	*b* 628,847	1,827,265,368
1877..	2,080	479,467,771	167,348,800	291,874,236	115,028,954	46,577,440	630,377,388	3,791,220	6,137,117	*b* 481,738	1,741,084,664
1878..	2,053	466,147,436	157,833,994	301,888,092	122,496,514	42,636,703	668,352,174	3,007,325	4,502,983	*b* 413,913	1,767,279,133
1879..	2,048	454,067,365	156,087,470	313,786,342	149,200,257	52,022,454	736,884,369	2,205,016	4,208,202	*b* 325,954	1,868,787,429
1880..	2,090	457,553,985	166,658,274	317,350,036	192,124,705	75,735,678	887,883,067	3,178,233	5,031,605	*b* 271,045	2,105,786,626
1881..	2,132	463,821,985	184,512,809	320,200,069	205,862,946	89,047,471	1,086,942,370	3,091,165	4,664,077	*b* 244,399	2,358,387,392
1882..	2,269	483,104,213	193,157,761	314,721,215	180,075,750	79,885,652	1,138,071,777	5,747,615	4,848,518	*b* 221,177	2,399,833,677
1883..	2,501	509,699,787	203,552,441	310,517,857	186,828,677	83,602,073	1,066,830,383	7,387,537	4,053,253	*b* 184,357	2,372,656,365
1884..	2,664	524,271,345	210,289,275	289,775,123	173,979,150	72,408,207	993,001,670	11,008,595	4,580,862	*b* 179,653	2,279,493,880
1885..	2,714	527,524,410	205,960,161	268,869,597	213,534,906	86,115,061	1,120,147,797	8,432,793	2,191,380	*b* 136,898	2,432,913,002
1886..	2,852	548,240,730	223,752,686	228,672,610	218,395,951	90,246,483	1,191,759,420	10,594,177	2,067,693	*b* 125,002	2,513,854,751
1887..	3,049	578,462,765	245,364,608	167,283,343	227,491.984	102,094,626	1,277,196,205	17,312,807	4,888,440	*b* 98,699	2,620,193,476
1888..	3,140	592,621,656	262,954,991	151,702,810	260,697,969	114,936,397	1,408,833,600	17,305,751	6,615,813	*b* 82,355	2,815,751,341
1889..	3,290	612,584,095	282,261,630	128,450,600	293,015,193	132,327,094	1,525,592,874	16,782,511	7,196,238	*b* 80,411	2,998,290,646
1890..	3,540	650,447,235	310,570,531	122,928,085	285,081,259	141,350,727	1,597,070,082	23,660,330	10,301,914	*b* 77,334	3,141,487,495
1891..	3,677	677,426,870	330,861,160	131,323,302	288,576,703	142,018,070	1,610,039,150	21,981,953	10,778,945	*b* 74,119	3,213,080,271
1892..	3,773	686,573,015	340,524,180	143,423,298	352,046,184	178,607,018	1,783,184,728	17,132,488	6,549,164	2,054,824	3,510,094,897
1893..	3,781	678,540,339	350,225,444	182,959,726	226,423,979	122,891,098	1,468,321,602	21,066,737	27,426,937	31,707,422	3,109,563,284
1894..	3,755	668,861,847	334,121,082	172,331,978	343,692,317	183,167,780	1,744,736,512	11,453,428	12,552,278	3,004,834	3,473,922,055
1895..	3,712	657,135,499	336,888,351	182,481,611	320,228,677	174,708,673	1,716,865,788	13,396,108	17,813,360	4,111,278	3,423,629,344
1896..	3,676	648,540,325	336,342,835	209,944,019	269,043,387	146,058,794	1,614,728,109	14,881.061	20,431,427	3,715,357	3,263,685,314
1897..	3,610	631,488,095	334,752,001	198,920,670	418,644,282	227,063,685	1,871,274,362	7,206,046	12,549,510	3,235,057	3,705,133,708

* Including state bank circulation and amounts due to banks other than national. † Including state bank circulation.

a. Circulation issued by the banks for which they are liable, but not including that for the retirement of which lawful money has been deposited. *b*. State bank circulation outstanding. *c*. Including individual deposits, United States deposits, deposits of United States disbursing officers, and dividends unpaid.

No. 23.—PRINCIPAL ITEMS OF NATIONAL BANK STATEMENTS, 1863–1897.—*Continued.*

About Oct. 1, each year	Loans and discounts	Bonds held to secure circulation	Other United States bonds	Other bonds and securities	Due from reserve agents	Due from other national banks	Due from state banks	Real estate and banking house	Clearing house exchanges and cash items
1863...	5,466,088	....	....	5,665,104	....	[1] 2,625,597	....	177,565	492,139
1864...	93,238,658	....	....	108,064,400	....	19,965,720	14,051,396	2,202,318	7,640,169
1865...	487,170,136	....	....	430,316,801	....	89,978,981	17,393,232	14,703,282	72,309,854
1866...	603,314,705	331,843,200	94,974,650	18,381,264	....	107,650,174	15,211,117	17,134,003	103,684,249
1867...	609,675,215	338,640,150	80,322,900	24,272,068	....	95,217,610	8,389,226	20,639,708	134,603,232
1868...	657,668,848	340,487,050	74,177,750	22,513,222	....	102,278,548	7,848,822	22,747,875	143,241,395
1869...	682,883,107	339,480,100	44,607,950	24,343,062	56,669,563	35,393,563	8,790,419	25,169,189	108,809,817
1870...	715,928,080	340,857,450	37,705,300	26,105,943	66,275,669	33,948,806	9,202,497	27,470,747	91,626,302
1871...	831,552,210	364,475,800	45,841,150	30,017,950	86,878,609	43,525,362	12,772,670	30,089,784	115,224,123
1872...	877,197,923	382,046,400	27,622,300	30,080,000	80,717,071	34,486,594	12,976,878	32,276,498	125,003,100
1873...	944,220,116	388,330,400	23,629,850	31,461,878	96,134,121	41,413,680	12,022,873	34,661,823	100,359,917
1874...	954,394,792	383,254,800	28,005,250	36,184,486	83,885,127	39,695,309	11,196,612	38,112,927	109,680,104
1875...	984,691,434	370,321,700	28,087,150	42,175,136	85,701,260	47,028,769	11,963,769	42,366,648	87,901,735
1876...	931,304,714	337,170,400	47,840,150	45,160,408	87,326,950	47,525,090	12,061,283	43,121,942	99,913,957
1877...	891,920,594	336,810,950	44,991,700	43,655,170	73,284,133	45,217,247	11,415,762	45,229,983	86,199,803
1878...	833,988,451	347,556,650	94,722,450	43,994,271	85,083,419	41,492,919	12,314,698	46,702,476	93,354,970
1879...	878,503,097	357,313,300	71,146,750	44,004,336	107,023,547	46,692,995	13,630,773	47,817,169	24,271,097
1880...	1,040,977,268	357,789,350	43,620,400	52,351,620	134,562,779	63,023,797	15,881,198	48,045,833	133,824,252
1881...	1,173,796,083	363,385,500	56,406,750	66,090,889	132,968,183	78,505,446	19,306,827	47,329,111	204,054,135
1882...	1,243,203,210	357,631,750	37,425,750	72,684,072	113,277,228	68,516,841	17,105,468	46,537,066	223,150,565
1883...	1,309,244,782	351,412,850	30,674,050	79,178,105	124,918,729	65,714,229	18,266,275	48,337,665	109,934,261
1884...	1,245,294,093	327,435,000	30,419,600	82,996,109	111,993,020	6,335,545	15,833,983	49,900,887	81,050,217
1885...	1,306,143,990	307,657,050	31,786,400	90,006,564	138,378,515	78,967,698	17,987,891	51,293,801	100,384,310
1886...	1,450,957,055	258,498,950	32,432,400	96,128,796	140,764,579	80,526,616	20,140,256	54,090,071	108,814,111
1887...	1,587,549,134	189,083,100	34,671,350	106,119,781	140,873,588	93,302,414	22,103,677	57,968,160	103,466,831
1888...	1,684,180,624	171,867,200	60,715,050	117,368,302	170,458,594	99,821,001	23,767,261	62,634,792	117,510,776
1889...	1,817,257,703	146,471,700	48,501,200	125,927,553	189,136,281	117,869,749	28,417,511	69,377,174	153,842,949
1890...	1,986,058,320	139,969,050	30,684,000	129,777,439	189,451,786	118,289,612	28,485,223	76,835,316	123,968,995
1891...	2,005,463,206	150,035,600	24,871,950	139,884,777	193,990,323	115,196,682	29,471,899	83,270,122	135,312,427
1892...	2,171,041,088	163,275,300	20,164,250	168,565,131	236,434,331	140,516,353	32,572,736	87,861,912	123,228,673
1893...	1,843,634,168	206,463,850	17,576,950	162,551,818	158,499,644	94,740,015	24,229,107	89,151,776	121,541,159
1894...	2,007,122,191	199,642,500	25,888,200	207,924,351	248,849,608	122,479,068	27,973,912	97,892,137	104,101,028
1895...	2,059,408,402	208,682,765	26,118,350	211,497,195	222,287,251	123,521,087	30,830,483	103,771,877	70,563,213
1896...	1,893,268,839	237,291,650	25,135,500	206,625,348	190,077,533	111,830,936	29,583,300	105,449,973	90,673,546
1897...	2,066,776,114	227,483,950	32,490,750	226,092,784	297,017,806	155,980,448	41,410,311	108,417,487	127,840,954

[1] Includes also amount due from state banks.

No. 23.—PRINCIPAL ITEMS OF NATIONAL BANK STATEMENTS, 1863–1897.—*Continued.*

About Oct. 1, each year	Notes of other banks	Fractional currency	Specie	Legal tender notes	Compound interest notes	Three per cent. certificates	Due from United States treasurer	Other resources
1863...	764,725	....	1,446,608 *	....	....	....	....	159,818
1864...	4,687,727	....	44,801,497 *	....	....	....	....	2,456,309
1865...	16,247,241	....	18,072,013	189,988,496 †	....	....	....	23,588,038
1866...	17,437,779	....	9,226,832	205,793,579 †	....	....	....	5,311,253
1867...	12,174,313	....	12,798,044	100,550,850 †	56,888,250	....	....	5,297,494
1868...	12,065,642	2,262,792	13,003,713	92,453,475	4,513,730	59,080,000	....	5,278,911
1869...	10,776,023	2,090,727	23,002,406	83,719,295	....	45,845,000	....	5,646,383
1870...	12,512,927	2,078,178	18,460,011	79,324,577	....	43,345,000	....	5,871,750
1871...	14,197,653	2,095,486	13,252,998	109,414,735	....	25,075,000	....	6,153,370
1872...	15,787,296	2,151,748	10,229,757	111,831,104	....	7,140,000	....	6,310,429
1873...	16,103,842	2,302,775	19,868,469	113,132,663	....	....	....	6,985,437
1874...	18,450,013	2,224,943	21,240,945	122,846,946	....	....	20,349,950	7,658,739
1875...	18,528,837	2,595,632	8,050,330	125,268,734	....	....	19,686,960	7,841,213
1876...	15,910,315	1,417,204	21,360,767	113,420,847	....	....	16,743,695	6,987,644
1877...	15,531,467	900,805	22,658,820	99,330,684	....	....	16,021,753	6,915,793
1878...	16,929,721	515,661	30,688,607	97,118,600	....	....	16,543,674	6,272,567
1879...	16,707,550	396,065	42,173,731	95,966,696	....	....	17,029,065	6,111,257
1880...	18,210,943	367,172	109,346,509	64,295,458	....	....	17,103,866	6,386,182
1881...	17,732,712	373,946	114,334,736	59,898,441	....	....	17,472,596	6,731,936
1882...	20,689,425	396,368	102,857,778	71,958,517	....	....	17,161,368	7,238,270
1883...	22,675,447	443,951	107,817,984	80,642,997	....	....	16,586,713	6,808,327
1884...	23,258,854	469,024	128,609,475	91,244,659	....	....	17,739,906	6,913,509
1885...	23,062,765	477,055	176,478,336	88,538,119	....	....	14,897,114	6,853,393
1886...	22,734,085	434,221	158,277,491	68,667,322	....	....	13,950,098	7,438,741
1887...	21,937,884	540,595	165,085,964	79,941,255	....	....	9,295,852	8,253,891
1888...	21,600,818	684,268	178,098,236	90,054,461	....	....	8,491,201	8,498,758
1889...	20,875,528	682,035	164,326,449	99,697,093	....	....	7,381,796	8,525,925
1890...	18,492,392	766,847	195,908,859	86,759,731	....	....	6,940,521	9,099,402
1891...	19,991,167	867,462	183,515,076	113,335,608	....	....	7,994,739	9,879,231
1892...	19,557,474	934,648	209,116,379	118,262,945	....	....	8,246,553	10,317,125
1893...	22,402,611	1,026,814	224,703,860	121,729,352	....	....	10,240,164	11,071,997
1894...	18,580,577	952,933	237,250,655	165,644,028	....	....	9,620,868	....
1895...	15,537,100	936,484	196,237,311	143,866,685	....	....	10,371,140	....
1896...	18,055,536	966,835	200,808,632	142,334,730	....	....	11,582,955	....
1897...	20,575,420	962,825	239,387,702	149,494,929	....	....	11,823,552	....

* Includes also "other lawful money."

† Includes "fractional currency."

No. 24.—ABSTRACT OF REPORTS OF THE NATIONAL BANKS OF THE UNITED STATES ON OCTOBER 5, 1897.

[Total Number of Banks, 3,610.]

RESOURCES.		
Loans and Discounts		$2,051,009,438.17
Overdrafts		15,766,675.73
U. S. Bonds to secure circulation		227,483,950.00
U. S. Bonds to secure U. S. Deposits		17,003,000.00
U. S. Bonds on hand		15,487,750.00
Premiums on U. S. Bonds		17,261,220.25
Stocks, Securities, etc		208,831,563.40
Banking House, Furniture and Fixtures		79,113,954.38
Other Real Estate and Mortgages owned		29,303,532.43
Due from National Banks		155,980,447.58
Due from State Banks and Bankers		41,410,311.27
Due from approved Reserve Agents		297,017,805.64
Checks and other Cash Items		15,535,418.93
Exchanges for Clearing House		112,305,535.60
Bills of other National Banks		20,575,420.00
Fractional Currency, Nickels and Cents		962,824.72
Lawful Money Reserve on hand:		
Gold Coin	$118,856,207.65	
Gold Certificates	17,513,900.00	
Gold Clearing House Certificates	59,525,000.00	
Total Gold	195,895,107.65	
Silver Dollars	$ 6,476,504.00	
Silver Certificates	31,593,302.00	
Fractional Silver	5,422,788.40	
Total Silver	43,492,594.40	
Total Specie		239,387,702.05
Legal Tenders	107,219,929.00	
Currency Certificates	42,275,000.00	
Total Legal Tenders		149,494,929.00
Five per cent. Redemption Fund		10,021,689.08
Due from Treasurer U. S.		1,180,539.48
Total		$3,705,133,707.71
LIABILITIES.		
Capital Stock paid in		631,488,095.00
Surplus Fund		246,345,020.33
Undivided Profits, less Expenses and Taxes		88,406,980.50
National Bank Notes issued	$204,097,905.00	
Less amount on hand	5,177,235.00	198,920,670.00
State Bank Notes outstanding		60,380.50
Due to other National Banks		418,644,281.57
Due to State Banks and Bankers		227,063,685.28
Dividends unpaid		1,783,051.38
Individual Deposits		1,853,349,128.50
U. S. Deposits		12,081,247.69
Deposits of U. S. Disbursing Officers		4,060,933.96
Notes and Bills rediscounted		7,206,046.17
Bills payable		12,549,510.47
Liabilities other than those above stated		3,174,676.36
Total		$3,705,133,707.71

No. 25—CLASSIFICATION OF STATE BANKS BY CAPITAL STOCK IN EACH STATE AND GEOGRAPHICAL DIVISION.[1]

States and Territories	$10,000 or less		Over $10,000 and not over $20,000		Over $20,000 and not over $50,000		Over $50,000 and not over $100,000		Over $100,000	
	No.	Capital	No.	Capital	No.	Capital	No.	Capital	No.	Capital
Maine	..	....	..	....	..	....	..	....	..	....
New Hampshire	..	....	..	....	2	75,000	..	....	..	....
Vermont	..	....	..	....	..	....	..	....	..	....
Massachusetts	.	....	..	....	..	....	..	....	..	....
Rhode Island	..	....	..	....	..	....	1	$100,000	2	320,000
Connecticut	..	....	..	....	1	50,000	1	100,000	6	2,090,000
Total New England States	..	....	..	....	3	125,000	2	200,000	8	2,410,000
New York	..	....	..	....	61	1,703,000	87	7,090,000	63	21,922,700
New Jersey	..	....	2	36,710	2	60,000	16	1,138,750	1	500,000
Pennsylvania	.	....	..	....	33	1,523.735	35	3,126.985	17	4,100,150
Delaware	..	....	..	....	1	25,000	..	....	3	580,000
Maryland	1	6,250	..	....	7	198,720	1	100,000	5	1,225,000
District of Columbia	..	....	..	....	..	....	.	....	..	....
Total East'n States	1	6,250	2	36,710	104	3,510.455	139	12,255,735	89	28,327,850
Virginia	8	47,240	17	262,100	24	883,300	11	868,775	14	3,030,697
West Virginia	3	21,500	4	53,086	37	1,217,440	8	646,600	6	1,085,000
North Carolina	7	61,600	7	131,025	15	575,100	8	655,000	3	546,000
South Carolina	1	8,000	2	40,000	24	884,000	20	1,535,400	2	286,700
Georgia	..	....	6	81,800	59	2,135,635	29	2,306,100	20	4,732.400
Florida	..	....	9	150,000	9	340,000	1	60,000	..	....
Alabama	..	....	1	12,500	20	840,500	10	725,200	2	350,000
Mississippi	3	35,600	11	169,750	38	1,402,200	17	1,399,966	2	361,500
Louisiana	3	25,800	10	142,400	17	649,000	2	190,000	4	1,055,200
Texas	..	....	1	20,000	1	50,000	2	200,000	1	200,000
Arkansas	11	86,000	14	231,225	10	1,252,825	11	1.038,630	2	350.000
Kentucky	3	27,500	33	542,515	32	1,043,410	14	1,067.700	16	9,489,500
Tennessee	6	52,700	25	415,095	52	1,847,025	11	889,650	5	1,650,000
Total Sou'rn States	45	365,940	140	2,251,496	338	13,120,435	144	11 583 021	77	23,136,997
Ohio	..	....	8	141,250	49	1,716,750	14	1,167,500	9	1,844,000
Indiana	..	....	..	....	81	2,754,500	14	1,145,000	3	750,000
Illinois	..	....	..	....	85	2,640,000	8	800,000	14	4,772,000
Michigan	1	5,000	13	213,000	45	1,840,000	13	1.165,000	3	500,000
Wisconsin	..	....		....	103	3,325,700	21	1,830,000	6	1,700,000
Minnesota	20	200,000	17	274,200	95	3,171,000	7	571,000	5	2,050,000
Iowa	..	....	..	....	171	6,011,300	34	2,439,000	3	460,500
Missouri	132	1,303,650	139	2,403,000	157	5,753,500	34	3,135,000	20	7,385,000
Total Middle States	153	1,508,650	177	3,031,450	786	27,212,750	145	12,252,500	63	19;461,500
North Dakota	48	392,000	11	184,500	14	557,000	..	.....	.	....
South Dakota	57	419,750	21	330,960	27	811,400	1	60,000	..	....
Nebraska	116	1,037,950	95	1,481,000	98	3,120,900	12	914,100	1	110,000
Kansas	107	805,013	65	1,091,885	84	2,621,140	9	695,000	1	350,000
Montana	.	....	1	20,000	4	130,000	2	175,000	1	200,000
Wyoming	3	30,000	1	12,000	1	30,000		....	..	....
Colorado	..	....	1	15,000	20	745,000	3	210,000	..	....
New Mexico	..	....	..	....	5	190,000	1	71,700	..	....
Oklahoma	13	97,000	6	92,700	9	255,000	..	....	..	....
Indian Territory	..	....	..	....	..	....	.	....	..	....
Total West'n States	344	2,781,713	201	3,278,045	262	8,460,440	28	2,125,800	3	660,000
Washington	2	20,000	6	96,000	15	503,300	4	270,000	1	200,000
Oregon	..	....	3	59,000	15	547,300	3	275,000	..	....
California	2	16,000	8	131,404	50	1,905,915	49	4,100,867	64	27,303,545
Idaho	1	10,000	4	70,350	4	172,500	..	....	..	....
Utah	..	....	..	....	4	125,000	1	100,000	3	775,000
Nevada	1	10,000	1	20,000	1	50,000	1	100,000	2	350,000
Arizona	..	....	3	57,000	3	97,500	1	100,000	..	....
Total Pacific States	6	56,000	25	433,754	92	3,401,515	59	4,945,867	70	28,628,545
Total United States	549	4,718,553	545	8,981,455	1585	55,830,595	517	43,362,923	310	102,624,892

[1] This table has been compiled chiefly from information kindly furnished by the bank examiners of the several states in response to the request of the Commission. In the case of some states where there was no bank examiner, or it was impossible to obtain official information, an estimate based upon the figures given in *Rand, McNally & Company's Bankers' Directory* (July 1897) has been made.

No. 26—CLASSIFICATION OF NATIONAL BANKS BY CAPITAL STOCK, IN EACH STATE AND GEOGRAPHICAL DIVISION, OCTOBER 31, 1897.

States and Territories	$50,000 banks		Between $50,000 and $100,000 banks		$100,000 banks		Between $100,000 and $200,000 banks		$200,000 banks	
	No.	Capital	No.	Capital	No.	Capital	No.	Capital	No.	Capital
Maine	31	$1,550,000	6	$456,000	21	$2,100,000	10	$1,365,000	4	$ 800,000
New Hampshire	10	500,000	6	435,000	13	1,300,000	15	2,195,000	7	1,400,000
Vermont	7	350,000	5	375,000	18	1,800,000	8	1,160,000	3	600,000
Massachusetts	14	700,000	4	277,500	54	5,400,000	37	5,370,000	43	8,600,000
Rhode Island	1	50,000	2	135,000	11	1,100,000	10	1,380,250	6	1,200,000
Connecticut	3	150,000	3	225,000	19	1,900,000	10	1,415,000	8	1,600,000
Total New England States	66	3,300,000	26	1,903,500	136	13,600,000	90	12,885,250	71	14,200,000
New York	79	3,950,000	21	1,444,500	80	8,000,000	45	6,333,440	27	5,400,000
New Jersey	31	1,550,000	6	425,000	28	2,800,000	10	1,410,000	11	2,200,000
Pennsylvania	120	6,000,000	29	2,084,220	105	10,500,000	44	6,184,150	43	8,600,000
Delaware	5	250,000	7	510,800	1	100,000	1	110,000	....	....
Maryland	21	1,050,000	7	460,000	13	1,300,000	3	400,000	3	600,000
District of Columbia	......	....	....	....	1	100,000	....	.....	6	1,200,000
Total East'n States	256	12,800,000	70	4,924,520	228	22,800,000	103	14,437,590	90	18,000,000
Virginia	12	600,000	2	141,000	11	1,100,000	1	150,000	3	600,000
West Virginia	8	400,000	8	570,000	10	1,000,000	3	431,000	2	400,000
North Carolina	12	600,000	1	51,000	6	600,000	5	725,000	1	200,000
South Carolina	1	50,000	5	348,000	6	600,000	1	150,000	1	200,000
Georgia	11	550,000	2	116,000	5	500,000	4	600,000	3	600,000
Florida	8	400,000	....	.....	6	600,000	1	150,000	....	......
Alabama	8	400,000	3	205,000	7	700,000	1	125,000	2	400,000
Mississippi	3	150,000	1	75,000	5	500,000	1	130,000	....	....
Louisiana	8	400,000	1	60,000	2	200,000	....	....	2	400,000
Texas	84	4,200,000	30	2,040,000	49	4,900,000	18	2,545,000	7	1,400,000
Arkansas	2	100,000	....	....	3	300,000	1	120,000	2	400,000
Kentucky	14	700,000	8	537,000	19	1,900,000	13	1,847,900	9	1,800,000
Tennessee	13	650,000	12	785,000	9	900,000	3	475,000	2	400,000
Total Sou'rn States	184	9,200,000	73	4,928,000	138	13,800,000	52	7,448,900	34	6,800,000
Ohio	60	3,000,000	22	1,421,100	65	6,500,000	31	4,380,000	23	4,600,000
Indiana	29	1,450,000	8	567,000	47	4,700,000	10	1,345,000	11	2,200,000
Illinois	87	4,350,000	24	1,673,000	59	5,900,000	13	1,748,000	15	3,000,000
Michigan	28	1,400,000	6	420,000	27	2,700,000	9	1,325,000	4	800,000
Wisconsin	30	1,500,000	9	610,000	20	2,000,000	9	1,300,000	2	400,000
Minnesota	37	1,850,000	10	690,000	6	600,000	2	300,000	2	400,000
Iowa	100	5,000,000	10	690,000	39	3,900,000	4	595,000	8	1,600,000
Missouri	26	1,300,000	4	265,000	19	1,900,000	....	....	3	600,000
Total Middle States	397	19,850,000	93	6,336,100	282	28.200,000	78	10,993,000	68	13,600,000
North Dakota	21	1,050,000	1	60,000	4	400,000	1	150,000	....	......
South Dakota	19	950,000	3	195,000	4	400,000	1	150,000	....	....
Nebraska	64	3,200,000	13	875,000	14	1,400,000	2	300,000	2	400,000
Kansas	64	3,200,000	9	632,100	21	2,100,000	4	535,000	....	....
Montana	7	350,000	2	155,000	3	300,000	4	550,000	4	800,000
Wyoming	3	150,000	3	210,000	5	500,000	....	....	....	....
Colorado	19	950,000	4	282,000	10	1,000,000	...	....	1	200,000
New Mexico	2	100,000	....	....	2	200,000	2	300,000	....	....
Oklahoma	6	300,000	....	....	....	......	....	....	....	....
Indian Territory	8	400,000	1	60,000	2	200,000	....	....	....	....
Total West'n States	213	10,650,000	36	2,469,100	65	6,500,000	14	1,985,000	7	1,400,000
Washington	13	650,000	3	180,000	9	900,000	3	480,000	3	600,000
Oregon	18	900,000	6	420,000	2	200,000	....	....	....	....
California	5	250,000	1	75,000	11	1,100,000	4	600,000	3	600,000
Idaho	8	400,000	....	....	2	200,000	....	.....	....	....
Utah	4	200,000	...	....	2	200,000	1	150,000	2	400,000
Nevada	......	....	1	82,000	....	......	....	....	....	.....
Arizona	2	100,000	....	....	3	300,000	....	....	....	....
Total Pacific States	50	2,500,000	11	757,000	29	2,900,000	8	1,230.000	8	1,600,000
Total United States	1,166	58,300.000	309	21,318,220	878	87,800,000	345	48,978,740	278	55,600,000

No. 26—CLASSIFICATION OF NATIONAL BANKS BY CAPITAL STOCK, IN EACH STATE AND GEOGRAPHICAL DIVISION, OCTOBER 31, 1897 — *Continued.*

Between $200,000 and $500,000 banks		$500,000 banks		Between $500,000 and $1,000,000 banks		$1,000,000 banks		Between $1,000,000 and $5,000,000 (inclusive) banks		Total number of banks	Total authorized capital stock
No.	Capital	No.	Capital	No.	Capital	No.	Capital	No.	Capital		
8	$2,500,000	....	....	2	$ 1,400,000	1	$ 1,000,000	....	....	83	$11,171,000
....	....	....	....	....	....	....	....	....	....	51	5,830,000
7	2,200,000	1	$ 500,000	....	....	....	....	....	....	49	6,985,000
54	16,180,000	15	7,500,000	11	8,200,000	26	26,000,000	9	$ 16,100,000	267	94,327,500
10	3,224,950	11	5,500,000	1	600,000	3	3,000,000	2	3,146,850	57	19,337,050
24	7,276,070	8	4,000,000	3	1,775,000	2	2,000,000	1	1,200,000	81	21,541,070
103	31,381,020	35	17,500,000	17	11,975,000	32	32,000,000	12	20,446,850	588	159,191,620
37	11,042,000	8	4,000,000	8	5,500,000	10	10,000,000	*a* 11	*a* 27,500,000	326	83,169,940
12	3,560,000	5	2,500,000	....	....	....	....	....	....	103	14,445,000
49	15,165,020	20	10,000,000	9	6,460,000	4	4,000,000	4	6,200,000	427	75,193,390
3	613,185	1	500,000	....	....	....	....	....	....	18	2,083,985
7	2,011,700	6	3,000,000	5	3,462,560	1	1,000,000	3	3,820,700	69	17,104,960
5	1,327,000	1	500,000	....	....	....	....	....	....	13	3,127,000
113	33,718,905	41	20,500,000	22	15,422,560	15	15,000,000	18	37,520,700	956	195,124,275
5	1,455,000	....	....	1	600,000	....	....		....	35	4,646,000
2	550,000	....	....	....	....	....	....	....	....	33	3,351,000
2	525,000	....	....	....	....	....	....	....	....	27	2,701,000
2	550,000	....	....	....	....	....	....	....	....	16	1,898,000
4	1,150,000	1	500,000	....	....	....	....	....	....	30	4,016,000
....	....	....	....	....	....	....	....	....	....	15	1,150,000
5	1,525,000	....	....	....	....	....	....	....	....	26	3,355,000
....	....	....	....	....	....	....	....	....	....	10	855,000
5	1,600,000	1	500,000	....	....	....	....	....	....	19	3,160,000
10	2,800,000	3	1,500,000	1	600,000	....	....	....	....	202	19,985,000
1	300,000	....	....	....	....	....	....	....	....	9	1,220,000
8	2,580,000	3	1,500,000	1	800,000	....	....	....	....	75	11,664,900
3	850,000	3	1,500,000	2	1,200,000	2	2,000,000		....	49	8,760,000
47	13,885,000	11	5,500,000	5	3,200,000	2	2,000,000	....	....	546	66,761,900
25	7,634,867	10	5,000,000	5	3,300,000	4	4,000,000	4	5,400,000	249	45,235,967
7	2,050,000	2	1,000,000	....	....	1	1,000,000	....	....	115	14,312,000
7	1,875,000	2	1,000,000	1	750,000	8	8,000,000	4	9,000,000	220	37,296,000
3	1,000,000	4	2,000,000	2	1,500,000	1	1,000,000	....	....	84	12,145,000
6	1,850,000	1	500,000	....	....	2	2,000,000	....	....	79	10,160,000
4	975,000	3	1,500,000	1	600,000	5	5,000,000	1	1,250,000	71	13,165,000
4	1,250,000	....	....	....	....	....	....	....	....	165	13,035,000
3	750,000	....	....	1	600,000	5	5,000,000	2	4,400,000	63	14,815,000
59	17,384,867	22	11,000,000	10	6,750,000	26	26,000,000	11	20,050,000	1,046	160,163,967
....	....	....	....	....	....	....	....	....	....	27	1,660,000
....	....	....	....	....	....	....	....	....	....	27	1,695,000
6	2,150,000	2	1,000,000	....	....	1	1,000,000	....	....	104	10,325,000
4	1,200,000	....	....	....	....	1	1,000,000	....	....	103	8,667,100
....	....	1	500,000	....	....		....	....	....	21	2,655,000
....	....	....	....	....	....	....	....	....	....	11	860,000
3	800,000	4	2,000,000	....	....	....	....	....	....	41	5,232,000
....	....	....	....	....	....	....	....	....	....	6	600,000
....	....	....	....	....	....	....	....	....	....	6	300,000
....	....	....	....	....	....	....	....	....	....	11	660,000
13	4,150,000	7	3,500,000	....	....	2	2,000,000	....	....	357	32,654,100
3	900,000	....	....	1	528,000	....	....	....	....	35	4,238,000
2	500,000	2	1,000,000	....	....	....	....	....	....	30	3,020,000
4	1,250,000	2	1,000,000	....	....	1	1,000,000	1	1,500,000	32	7,375,000
....	....	....	....	....	....	....	....	....	....	10	600,000
1	300,000	1	500,000	....	....	....	....	....	....	11	1,750,000
....	....	....	....	....	....	....	....	....	....	1	82,000
....	....	....	....	....	....	....	....	....	....	5	400,000
10	2,950,000	5	2,500,000	1	528,000	1	1,000,000	1	1,500,000	124	17,465,000
345	103,469,792	121	60,500,000	55	37,875,560	78	78,000,000	42	79,517,550	3,617	631,360,862

a Includes two $5,000,000 banks in New York City.

No. 27.—ABSTRACT OF REPORTS OF NATIONAL BANKS, OCTOBER 5, 1897, BY STATES.

	Number of banks	Capital stock paid in	Loans and discounts	National bank notes outstanding	Individual deposits
CENTRAL RESERVE CITIES.					
New York City	48	$ 48,600,000	$ 408,335,475.15	$ 16,183,457.50	$341,886,866.23
Chicago	19	19,700,000	86,832,905.67	616,365.00	70,692,162.85
St. Louis	6	8,400,000	32,060,316.20	1,852,200.00	21,676,339.80
Total of central reserve cities	73	76,700,000	527,228,697.02	18,652,022.50	434,255,368.88
OTHER RESERVE CITIES.					
Boston	54	50,350,000	164,807,923.87	7,576,892.50	120,934,342.12
Albany	6	1,550,000	8,303,219.94	349,590.00	6,808,166.19
Brooklyn	5	1,352,000	12,357,365.76	573,030.00	17,393,868.96
Philadelphia	41	21,915,000	102,577,519.47	7,184,875.00	103,701,935.10
Pittsburg	30	12,300,000	45,599,629.32	4,727,372.50	40,398,688.95
Baltimore	22	13,243,260	33,076,943.27	2,433,060.00	24,734,818.03
Washington	12	2,875,000	8,842,737.16	672,745.00	13,837,279.14
Savannah	2	750,000	1,174,800.91	90,355.00	543,444.24
New Orleans	7	2,300,000	11,630,881.62	758,045.00	13,380,301.27
Louisville	6	3,000,000	7,444,660.81	1,413,320.00	4,366,158.50
Houston	5	1,150,000	2,029,754.00	139,680.00	2,772,032.19
Cincinnati	13	7,800,000	23,778,025.25	4,820,450.00	19,244,420.35
Cleveland	12	9,550,000	28,471,475.47	1,332,810.00	21,683,266.89
Detroit	6	3,300,000	14,398,492.12	989,790.00	10,916,819.87
Milwaukee	5	3,250,000	15,522,444.32	623,380.00	22,534,159.68
Des Moines	4	800,000	2,651,371.74	259,137.50	1,582,470.63
St. Paul	5	3,800,000	8,803,064.16	212,550.00	9,506,325.61
Minneapolis	6	4,500,000	9,320,950.15	206,347.50	8,305,070.27
Kansas City	5	2,300,000	15,006,761.56	225,000.00	11,368,177.89
St. Joseph	2	350,000	1,906,847.73	134,100.00	1,934,953.60
Lincoln	3	800,000	1,796,169.69	135,000.00	1,360,852.92
Omaha	8	3,750,000	9,147,514.35	531,605.00	7,864,990.78
San Francisco	2	2,500,000	9,183,555.70	90,000.00	6,811,962.47
Total of other reserve cities	261	153,485,260	536,832,108.37	35,479,135.00	471,984,505.65
Total of all reserve cities	334	230,185,260	1,064,060,805.39	54,131,157.50	906,239,874.53
COUNTRY BANKS.					
Maine	83	11,171,000	23,558,869.02	5,218,253.00	17,370,759.19
New Hampshire	50	5,830,000	11,025,416.51	3,514,295.00	9,658,708.78
Vermont	49	6,985,000	12,292,381.33	3,765,422.50	9,267,640.55
Massachusetts	213	43,972,600	110,420,250.31	19,774,224.50	84,193,457.04
Rhode Island	57	19,337,050	34,589,409.75	7,053,495.00	19,523,347.16
Connecticut	81	21,541,070	44,615,900.71	8,064,704.50	34,853,964.72
Total of New England States	533	108,836,720	236,502,227.63	47,390,394.50	174,867,877.44
New York	267	31,657,940	92,782,676.03	15,084,910.00	93,036,579.65
New Jersey	103	14,445,000	52,105,939.06	5,013,609.50	57,172,946.63
Pennsylvania	356	40,969,790	111,725,265.54	17,174,565.00	118,319,190.81
Delaware	18	2,083,985	5,634,105.60	698,137.50	5,210,817.96
Maryland	46	3,811,700	10,267,949.25	1,733,740.00	11,256,143.37
District of Columbia	1	252,000	604,285.22	220,200.00	830,020.33
Total of Eastern States	791	93,220,415	273,120,220.70	39,925,162.00	285,825,698.75

No. 27.—ABSTRACT OF REPORTS OF NATIONAL BANKS, OCTOBER 5, 1897, BY STATES.—*Continued.*

Reserve required	Reserve held					
	Specie	Legal tenders	Due from reserve agents	Redemption fund with treasurer	Total reserve held	Ratio of reserve to deposits
25 per cent.						*Per cent.*
$126,724,386.29	$ 82,388,877.65	$ 54,117,648	....	$ 843,022.50	$137,349,548.15	27.10
26,428,631.73	21,730,387.55	16,328,145	....	58,500.00	38,117,032.55	36.06
8,255,349.16	2,341,991.10	5,736,688	....	93,417.50	8,172,096.60	24.75
161,408,367.18	106,461,256.30	76,182,481	....	994,940.00	183,638,677.30	28.44
38,491,875.83	11,120,216.89	9,015,894	$ 27,676,135.37	394,965.00	48,207,211.26	31.31
2.600,381.02	918,286.50	420,103	2,573,725.24	18,000.00	3,920,114.74	37.78
4,160,285.23	1,110,918.89	880,854	2,644,785.68	28,890.00	4,665,448.57	28.04
29,803,110.33	12.428,038.55	9,788,719	15,627,737.39	368,923.32	38,313,418.26	32.05
11,413,771.87	5,088,981.10	2,164,795	6,826,725.10	237,721.25	14,318,222.45	31.36
7,159,634.05	3,591,862.87	1,476,775	4,010,292,59	121,605.00	9,200,535.46	32.13
3,427,698.37	2,482,415.60	497,031	2,120,706.80	34,954.50	5,135,107.90	37.45
146,487.00	118,500.00	71,000	131,817.02	4,543.00	325,860.02	55.61
3,465,497.69	1,404,981.99	1,760,588	985,842.44	39,240.00	4,190,652.43	30.23
2,202,067.08	625,704.09	558,721	2,167,848.05	70,695.00	3,422,968.14	38.86
848,658.12	746.822.80	1,215,564	679,848.16	9,000.00	2,651,234.96	78.10
7,410,799.65	1,931,303.42	2,658,053	4,865,032.61	241,990.00	9.696,379.03	32.71
6,206,197.99	1,935,286.00	1,076,290	4,926,644.08	68,380.00	8,006,600.08	32.25
4,515,454.70	1,617,601.85	632,479	3.989,412.66	50,641.68	6,290,135.19	34.83
5,940,681.56	2,015,690.00	1,313,917	7,006,590.11	32,400.00	10,368,597.11	43.63
827,612.27	189,287.25	225,028	719,405.51	13,094.00	1,146,814.76	34.64
3,379,677.46	2,545,258.68	634,897	4,123,972.18	11,293.00	7,315,420.86	54.11
2,388,884.18	958,497.70	1,093,740	2,531,664.52	13,500.00	4,597,402.22	48.11
5,694,606.44	1,487,818.22	1,300,000	6,213.533.03	11,250.00	9,012,601.25	39.57
702,354.90	211,464.10	146,827	818,342.56	6,705.00	1,183,338.66	42.12
411,000.46	186,797.00	52,671	264,030.46	6,750.00	510,248.46	31.04
3,308.763.09	1,188,795.73	972,944	3,364,710.78	27,000.00	5,553,450.51	41.96
2,104,813.83	2,651,088.07	2,000	240,291.16	6,750.00	2,900,129.23	34.45
146,610,313.12	56,555,617.30	37,958,890	104,509,093.50	1,818,290.75	200,841,891.55	34.25
308,018,680.30	163,016,873.60	114,141,371	104,509,093.50	2,813,230.75	384,480,568.85	31.21
15 per cent.						
2,780,657.87	1,241,876.69	338,754	4,137,350.45	258,756.25	5,976,737.39	32.24
1,671,129.09	634.914.76	242,457	2,474,548.90	168,893.75	3,520,814.41	31.60
1,413,585.45	638,412.02	215,846	1,967,264.76	178,067.50	2,999,590.28	31.83
13,083,311.82	4,819,135.10	2,492,459	14,390,184.15	980,303.50	22,682,081.75	26.00
3,181,315.09	1,143,588.06	672,385	3,641,378.62	355,000.00	5,812,351.68	27.41
5,341,044.86	2,995,544.14	719,910	6,461,922 69	402,892.50	10,580,269.33	29.71
27,471,044.18	11,473,470.77	4,681,811	33,072,649.57	2,343,913.50	51,571,844.84	28.16
14,012,238.34	5,456,907.57	2,608,579	17,035,422.75	756,021.75	25,856,931.07	27.68
8,732,764.57	3,371,814.00	2,096,436	11,570,153.89	248,753.75	17,287,157.64	29.69
17,633,923.23	8,644,019.21	3,710,051	21,511,798.64	851,684.80	34,717,553.65	29.53
789,874.22	346,728.37	131,685	1,044,263.05	35,725.00	1,558,401.42	29.59
1,692,401.91	729,226.53	435,274	2,068,489.21	81,962.88	3,314,952.62	29.38
126,016.65	270,194.80	9,711	73,309.82	11,250.00	364,465.62	43.38
42,987,218.92	18,818,890.48	8,991,736	53,303,437.36	1,985,398.18	83,099,462.02	29.00

No. 27.—ABSTRACT OF REPORTS OF NATIONAL BANKS, OCTOBER 5, 1897, BY STATES.—*Continued.*

	Number of banks	Capital stock paid in	Loans and discounts	National bank notes outstanding	Individual deposits
Virginia	35	$ 4,646,300	$ 15,268,383.59	$ 1,993,442.50	$ 15,347,290.31
West Virginia	33	3,451,000	8,570,845.29	1,236,192.50	8,373,395.57
North Carolina	27	2,701,000	6,770,283.87	643,492.50	5,340,321.69
South Carolina	16	1,890,100	5,943,367.76	451,025.00	3,495,333.21
Georgia	28	3,266,000	8,613,652.81	898,657.50	6,707,489.11
Florida	15	1,150,000	3,242,704.73	300,830.00	3,905,048.13
Alabama	26	3,355,000	6,570,755.06	1,053,170.00	6,113,411.15
Mississippi	10	855,000	2,504,410.73	216,410.00	2,034,435.94
Louisiana	12	860,000	2,405,626.81	237,857.50	1,920,454.37
Texas	196	18,781,200	37,331,789.36	4,187,932.50	32,100,403.04
Arkansas	9	1,220,000	2,329,403.95	258.890.00	1,805,345.14
Kentucky	69	8,727,900	17,103,605.77	3,259,260.00	12,346,839.10
Tennessee	49	8,760,000	21,148,631.29	1,542,805.00	17,219,151.53
Total of Southern States	325	59,663,500	137,803,461.02	16,279,965.00	116,708,916.29
Ohio	223	27,830,100	66,570,637.93	10,559,780.00	64,308,142.55
Indiana	113	14,057,000	31,876,859.61	4.633,573.00	34,450,004.38
Illinois	202	17,776,000	46,863,899.28	5,484,937.50	48,035,386.79
Michigan	78	8,845,000	26,529,187.83	2,589,380.00	27,546,761.42
Wisconsin	74	6,910,000	19,545,362.47	1,973,695.00	21,209,646.28
Minnesota	60	4,865,000	13,618,347.90	1,131,265.00	15,991,212.92
Iowa	161	12,220,000	29,599,784.99	3,349,250.00	25,919,830.62
Missouri	50	3,765,000	7,795,723.45	1,018,790.00	7,913,592.20
Total of Middle States	961	96,268,100	242,399,803.46	30,740,670.50	245,374,577.16
North Dakota	27	1,635,000	4,321,771.40	417,657.50	5,689,171.75
South Dakota	27	1,695,000	3,080,170.47	427,532.50	4,215,569.22
Nebraska	93	5,925,000	11,983,099.97	1,362.288.00	11,066,244.58
Kansas	103	8,567,100	18,682,122.94	2,111,455.00	19,187,549.02
Montana	21	2,655,000	7,088,229.28	533,237.50	10,456,949.03
Wyoming	11	860,000	1,827,242.18	192,345.00	2,651,526.27
Colorado	41	5,232,000	18,494,475.74	1,131,885.00	28,154,527.37
New Mexico	6	600,000	1,551,071.31	303,760.00	2,775,904.23
Oklahoma	5	250,000	427,513.47	54,970.00	675,808.91
Indian Territory	10	595,000	1,084,917.33	127,660.00	1,165,294.73
Total of Western States	344	28,014,100	68,540,614.09	6,662,790.50	86,038,545.11
Washington	35	4,388,000	6,795,943.30	839,997.50	10,109,342.88
Oregon	30	3,020,000	6,351,552.12	818,157.50	8,625,950.45
California	30	5,060,000	10,896,318.41	1,377,445.00	12,099,856.65
Idaho	10	600,000	1,066,699.04	164,210.00	2,270,243.44
Utah	11	1,750,000	2,461,804.30	425,640.00	3,801.728.92
Nevada	1	82,000	212,164.71	18,450.00	251,037.95
Arizona	5	400,000	797,824.00	146,630.00	1,135,478.93
Total of Pacific States	122	15,300,000	28,582,305.88	3,790,530.00	38,293,639.22
Total of Country Banks	3276	401,302,835	986,948,632.78	144,789,512.50	947,109,253.97
Total of United States	3610	631,488,095	2,051,009,438.17	198,920,670.00	1,853,349,128.50

No. 27.—ABSTRACT OF REPORTS OF NATIONAL BANKS, OCTOBER 5, 1897, BY STATES.—*Continued.*

Reserve required	Reserve held					
	Specie	Legal tenders	Due from reserve agents	Redemption fund with treasurer	Total reserve held	Ratio of reserve to deposits
$ 2,372,065.47	$ 937,839.90	$ 758,562	$ 3,038,512.57	$ 99,209.24	$ 4,834,123.71	30.57
1,263,395.96	654,579.33	361,568	1,536,068.61	61,498.50	2,613,714.44	31.03
819,374.58	435,356.66	235,583	741,411.78	33,380.75	1,445,732.19	26,47
601,136.70	266,871.65	349,228	305,053.12	21,641.25	942.794.02	23.53
953,211.02	569,153.08	534,908	550,161.93	43,356.44	1,697,579.45	26.71
585,275.95	269,478.30	286,253	639,516.35	14,240.00	1,209,487.65	31.00
907,122.18	566,680.80	426,050	912,955.72	54,090.00	1,959,776.52	32.41
303,776.39	145,290.40	159,512	253,653.39	10,675.50	569,131.29	28.10
285,680.46	188,437.45	112,561	272,299.65	11,925.00	585,223.10	30.73
4,743,037.91	3,170,930.17	2,490,764	5,143,522.23	209,935.25	11,015,151.65	34.84
267,430.62	162,976.54	95,870	285,207.88	12,659.50	556,713.92	31.23
1,966,345.17	934,024.75	423,829	2,990,700.67	163,401.94	4,511,956.36	34.42
2,708,755.71	1,933,883.79	961,796	2,690,058.55	79,514.50	5,665,252.84	31.37
17,776,608.12	10,235,502.82	7,196,484	19,359,122.45	815,527.87	37,606,637.14	31.73
9,475,190.01	4,828,614.40	3,517,702	13,210,055.03	516,045.15	22,072,416.58	34.94
4,947,899.89	4,456,391.62	1,653,000	7,263,167.21	223,290.80	13,595,849.63	41.22
7,443,758.18	3,944,548.63	1,811,718	11,741,167.21	275,800.75	17,773,234.59	35.82
4,154,721.07	1,864,437.26	706,086	6,543,245.48	131,187.50	9,244,956.24	33.38
3,174,330.05	1,725,278.85	583,606	5,012,253.46	97,337.00	7,418,475.31	35.06
2,355,393.25	1,072,725.56	393,089	4,359,664.25	56,675.00	5,882,153.81	37.46
4,257,581.37	2,216,723.69	1,091,428	6,040,890.26	164,901.50	9,513,943.45	33.52
1,168,484.47	516,192.78	295,389	1,719,453.08	51,460.75	2,582,495.61	33.15
36,977,358.29	20,624,912.79	10,052,018	55,889,895.98	1,516,698.45	88,083,525.22	35.73
843,877.29	242,521.20	289,843	1,708,277.87	20,924.50	2,261,566.57	40.20
647,210.62	346,452.32	189,985	1,153,763.01	21,323.75	1,711,524.08	39.67
1,751,723.19	724,048.72	438,558	2,808,248.86	67,924.00	4,038,779.58	34.58
2,929,681.40	1,488,740.86	706,754	5,550,958.89	103,527.58	7,849,981.33	40.19
1,552,363.18	839,961.75	432,526	3,239,730.87	27,357.00	4,539,575.62	43.86
395,457.04	200,037.75	53,102	866,356.44	9,652.25	1,129,148.44	42.83
4,582,689.68	4,342,325.65	1,745,388	7,734,408.15	56,880.75	13,879,002.55	45.43
435,019.42	142,455.40	68,110	747,850.61	15,188.00	973,604.01	33.57
97,011.94	41,271.46	46,000	211,841.34	2,812.50	301,925.30	46.68
172,560.12	78,813.30	71,763	392,381.16	6,403.00	549,360.46	47.75
13,407,593.88	8,446,628.41	4,042,029	24,413,817.20	331,993.33	37,234,467.94	41.66
1,501,618.92	1,620,236.58	170,664	1,749,081.81	42,040.00	3,582,022.39	35.78
1,452,396.73	1,770,880.95	36,458	1,324,623.34	46,453.50	3,178,415.79	32.83
1,839,138.76	2,252,952.85	52,579	1,583,729.49	73,631.00	3,962,892.34	32.32
344,147.85	214,634.25	61,458	644,733.97	7,987.50	928,813.72	40.48
575,463.08	751,497.95	29,344	837,542.39	36,062.50	1,654,446.84	43.12
37,655.69	20,056.00	840	37,834.83	922.50	59,653.33	23.76
169,108.47	141,164.60	38,137	292,243.75	7,830.00	479,375.35	42.52
5,919,529.50	6,771,423.18	389,480	6,469,789.58	214,927.00	13,845,619.76	35.08
144,539,352.89	76,370,828.45	35,353,558	192,508,712.14	7,208,458.33	311,441,556.92	32.32
452,558,033.19	239,387,702.05	149,494,929	297 017,805.64	10,021,689.08	695,922,125.77	31.70

No. 28.—DISTRIBUTION OF COIN RESERVES OF NATIONAL BANKS, OCTOBER 5, 1897.

	Deposits, October 5, 1897	Gold coin held (including certificates)	Silver dollars held	Total gold and silver held	Total gold and silver coin required by Sec. 32 of plan
New York City	$ 506,897,545.15	$ 77,993,560.50	$ 92,988	$ 78,086,548.50	$ 31,681,096.57
Chicago	105,714,526.92	17,178,670.00	182,103	17,360,773.00	6,607,157.93
St. Louis	33,021,396.66	1,591,142.50	23,916	1,615,058.50	2,063,837.29
Total	645,633,468.73	96,763,373.00	299,007	97,062,380.00	40,352,091.79
Boston	153,967,503.31	8,579,075.50	74,451	8,653,526.50	9,622,968.95
Albany	10,401,524.08	835,673.00	22,701	858,374.00	650,095.25
Brooklyn	16,641,140.93	721,325.80	18,000	759,325.80	1,040,071.30
Philadelphia	119,212,441.30	8,317,588.00	210,420	8,528,008.00	7,450,777.58
Pittsburg	45,655,087.47	3,783,890.70	201,489	3,985,379.70	2,853,442.96
Baltimore	28,638,536.19	2,072,943.00	54,860	2,127,803.00	1,789,908.51
Washington	13,710,793.47	1,304,389.00	9,557	1,313,946.00	856,924.59
Savannah	585,948.00	31,000.00	8,000	39,000.00	36,621.75
New Orleans	13,861,990.78	886,463.50	48,759	935,222.50	866,374.42
Louisville	8,808,268.32	593,367.50	22,055	615,422.50	550,516.77
Houston	3,394,632.46	476,251.00	24,354	500,605.00	212,164.53
Cincinnati	29,643,198.61	1,397,450.00	54,734	1,452,184.00	1,852,699.91
Cleveland	24,824,791.94	1,716,110.00	75,892	1,792,002.00	1,551,549.49
Detroit	18,061,818.80	1,360,827.40	69,266	1,430,093.40	1,128,863.67
Milwaukee	23,762,726.23	1,838,175.00	20,463	1,858,638.00	1,485,170.39
Des Moines	3,310,449.09	141,595.00	17,947	159,542.00	206,903.06
St. Paul	13,518,709.83	1,996,843.88	112,500	2,109,343.88	844,919.36
Minneapolis	9,555,536.75	850,812.50	29,036	879,848.50	597,221.04
Kansas City	22,778,425.78	516,267.50	71,720	587,987.50	1,423,651.61
St. Joseph	2,809,419.60	95,817.50	9,869	105,686.50	175,588.72
Lincoln	1,644,001.86	159,270.00	13,923	173,193.00	102,750.11
Omaha	13,235,052.38	886,577.50	98,152	984,729.50	827,190.77
San Franciseo	8,419,255.31	2,601,667.50	9,120	2,610,787.50	526,203.45
Other reserve cities	586,441,252.49	41,163,380.78	1,277,268	42,440,648.78	36,652,578.28
All reserve cities	1,232,074,721.22	137,926,753.78	1,576,275	139,503,028.78	77,004,670.07
Maine	18,537,719.10	1,008,857.29	46,292	1,055,149.29	695,164.46
New Hampshire	11,140,860.59	441,318.86	41,308	482,626.86	417,782.27
Vermont	9,423,903.00	522,652.65	31,672	554,324.65	353,396 36
Massachusetts	87,222,078.87	3,453,308.06	245,725	3,699,033.06	3,270,827.95
Rhode Island	21,208,767.26	813,994.28	20,698	834,692.28	795,328.77
Connecticut	35,606,965.73	2,340,632.20	59,404	2,400,036.20	1,335,261.21
New England States	183,140,294.55	8,580,763.34	445,099	9,025,862.34	6,867,761.04
New York	93,414,922.25	4,350,686.27	256,246	4,606,932.27	3,503,059.58
New Jersey	58,218,430.48	2,033,353.38	111,211	2,144,564.38	2,183,191.14
Pennsylvania	117,559,488.22	6,053,663.27	531,406	6,585,069.27	4,408,480.80
Delaware	5,265,828.11	169,975.95	22,294	192,269.96	197,468.55
Maryland	11,282,679.41	400,895.98	33,954	434,849.98	423,100.47
District of Columbia	840,111.04	178,955.00	2,220	181,175.00	31,504.16
Eastern States	286,581,459.51	13,187,529.85	957,331	14,144,860.85	10,746,804.73

No. 28.—DISTRIBUTION OF COIN RESERVES OF NATIONAL BANKS, OCTOBER 5, 1897.—*Continued.*

	Deposits, October 5, 1897	Gold coin held (including certificates)	Silver dollars held	Total gold and silver held	Total gold and silver coin required by Sec. 32 of plan
Virginia	$ 15,813,769.81	$ 595,620.85	$ 88,698	$ 684,318.85	$ 593,016.36
West Virginia	8,422,639.74	457,543.47	42,050	499,593.47	315,848.99
North Carolina	5,462,497.24	308,560.50	39,515	348,075.50	204,843.64
South Carolina	4,007.577.97	123,438.50	50,604	179,042.50	150,284.17
Georgia	6,354,740.14	274,948.10	71,980	346,928.10	238,302.75
Florida	3,901,839.65	90,443.65	85,893	176,336.65	146,318.98
Alabama	6 047,481.20	360,913.60	87,459	448,372.60	226,780.54
Mississippi	2,025,175.94	77,295.50	42,407	119,702.50	75,944.09
Louisiana	1,904,536.37	60,661.50	42,658	103,319.50	71,420.11
Texas	31,620,252.73	1,746,343.40	689,799	2,436,142.40	1,185,759.47
Arkansas	1,782,870.85	101,912.00	10,286	112,198.00	66,857.65
Kentucky	13,108,967.82	743,188.50	65,094	808,282.50	491,586.29
Tennessee	18,058,371.38	1,251,997.05	205,330	1,457,327.05	677,188.92
Southern States	118,510,720.84	6,192,866.62	1,521,773	7,714,639.62	4,444,152.03
Ohio	63.167,933.42	3,912,938.73	329,810	4,242,748.73	2,368,797.50
Indiana	32,985,999.27	3,766,494.88	230,636	3,997,130.88	1,236,974.97
Illinois	49,625,054.54	3,116,194.73	267,944	3,384,138,73	1,860,939.54
Michigan	27,698,140.44	1,535,994.20	94,299	1.630,293.20	1,038,680.26
Wisconsin	21,162,200.36	1,426.382.91	85,657	1,512,039.91	793.582.51
Minnesota	15,702,621.69	884,776.00	53,065	937,841.00	588,848.31
Iowa	28,383,875.83	1,625,394.75	156,900	1,782,294.75	1,064,395.34
Missouri	7,789,896.49	345,751.50	76,160	421,911.50	292,121.11
Middle States	246,515,722.04	16,613,927.70	1,294,471	17,908,398.70	9,244,339.57
North Dakota	5,625,848.62	192,085.00	18,686	210,771.00	210,969.32
South Dakota	4,314,737.55	288,459.00	21,676	310,135.00	161,802.65
Nebraska	11,678,154.61	548,572.90	61,109	609,681.90	437,930.79
Kansas	19,531,209.32	1,066,779.16	172,523	1,239,302.16	732,420.35
Montana	10,349,087.89	693,786.40	49,254	743,040.40	388,090.79
Wyoming	2,636,380.27	178,849.60	11,376	190,225.60	98,864.26
Colorado	30,551,264.57	4,025 335.50	105,167	4,130,502.50	1,145,672.42
New Mexico	2,900,129.45	111,415.00	21,753	133,168.00	108,754.85
Oklahoma	646,746.24	15,770.00	8,587	24,357.00	24,252.98
Indian Territory	1,150,400.73	26,355.00	16,815	43,170.00	43,140.03
Western States	89,383,959.25	7,147,407.56	486,946	7,634,353.56	3,351,898.97
Washington	10,010,792.80	1,453,356.50	58,850	1,512,206.50	375,404.73
Oregon	9,682,644.83	1,685,285.00	31,599	1,716,884.00	363,099.18
California	12,260,925.07	2,071,650.00	67,999	2,139,649 00	459,784.69
Idaho	2,294,319.00	186,749.50	6,180	192,929.50	86,036.96
Utah	3,836.420.55	705,802.80	20,198	726,000,80	143,865.77
Nevada	251,037.95	16,200.00	2,512	18,712.00	9,413.92
Arizona	1,127,389.80	126,815.00	7,271	134,086.00	42,277.11
Pacific States	39,463,530.00	6,245,858.80	194,609	6,440,467.80	1,479,882.37
Country Banks	963,595.686.19	57,968,353.87	4,900,229	62,868,582.87	36,134,838.22
United States	2,195,670,407.41	195,895,107.65	6,476,504	202,371,611.65	113.139,508.29

No. 29. — TOTAL NATIONAL BANK NOTES RECEIVED FOR REDEMPTION AT THE REDEMPTION AGENCY AT WASHINGTON.

	1874	1875	1876	1877	1878	1879
Jan.	....	$15,890,898	$20,344,691	$19,979,045	$18,040,569	$12,169,897
Feb.	....	13,169,742	15,990,050	16,534,732	13,538,278	13,083,822
Mar.	....	15,250,942	15,191,539	17,369,189	12,025,805	11,869,175
April	....	17,295,133	14,728,674	20,976,029	15,766,848	10,346,522
May,	....	19,630,451	21,196,260	26,129,055	24,076,684	15,660,085
June,	....	18,231,007	23,606,005	27,829,179	23,615,670	13,398,800
July,	$10,538,171	19,257.094	22,549,397	17,905,054	22,785.473	9,123,425
Aug.	9,993,366	15,774,037	19,512,869	19,127,285	16,418,603	6,314,586
Sept.	7,823,976	13,348,395	17,910,848	15,438.232	13,292,206	4,508,041
Oct.	5,608,481	15,536,038	15,792,180	16,392,857	8,376,449	3,349,766
Nov.	10,686,906	13,160,961	16,684,853	17,340,759	8,936,806	3,251,634
Dec.	11,301,803	16,166,127	14,942,997	17,222,396	8,431,074	2,922,490

	1880	1881	1882	1883	1884	1885
Jan.	5,641,192	5,550,743	8,185,651	11,611,520	17,463,933	17,882,887
Feb.	3,960,505	4,498,501	6,345,210	7,534,232	11,516,444	10,972,096
Mar.	3,144,811	4,804,393	6,671,918	7,874,134	8,679,518	10,195,586
April	4,006,205	6,850,425	7,248,503	8,273,570	11,642,521	12,549,026
May,	7,554,660	8,035,983	9,042,641	12,134,950	12,037,496	14,189,983
June,	7,808,361	7,151,961	8,980,367	12,606,689	11,387,181	16,652,302
July,	4,709,894	4,988,307	7,363,382	9,250,942	12,886,241	12,131,083
Aug.	3,469,884	4,540,053	6,296,071	8,422,156	11,213,870	9,893,843
Sept.	3,348.638	3,622,833	5,640,717	7,387,227	8,746,775	7,588,980
Oct.	3,708,448	4,945,668	6,858,152	8,569,201	11,207,800	10,111,976
Nov.	3,369,417	5,034,073	7,435,077	9,172,395	11,471,644	7,772,270
Dec.	4,151,971	6,484,104	9,071,182	10,623,458	12,240,921	11,237,901

	1886	1887	1888	1889	1890	1891
Jan.	17,485,298	11,513,904	12,232,503	12,256,553	8,266,222	9,443,920
Feb.	12,208,474	7,769,081	9,176,339	7,164,265	5,001,433	4,953,537
Mar.	10,825,508	5,943,971	7,916,274	5,735,355	5,273,365	5,115,459
April	8,420,691	6,908,850	9,642,090	6,035,826	5,445,498	5,048,370
May,	11,480,256	7,866,911	12,302,623	9,039,602	6,417,309	7,262,701
June,	11,140,326	6,878,141	11,387,533	7,941,337	6,164,976	7,566,764
July,	9,261,571	5,903,291	9,224,960	6,510,302	5,693,418	6,368,612
Aug.	6,296,341	5,921,000	6,984,802	5,644,911	4,799,417	4,981.988
Sept.	5,438,047	5,101,627	5,205,273	4,710,379	4,256,903	4,710,379
Oct.	5,918,365	5,541;736	5,845,727	5,579,573	4,281,207	5,188,589
Nov.	5,954,011	5,799,075	5,805,923	5,394,525	4,327,087	5,013,820
Dec.	7,940,494	8,228,273	7,692,436	5,848,455	4,711,836	5,909,334

	1892	1893	1894	1895	1896	1897
Jan.	7,788,484	9,731,987	13,176,204	10,376,851	13,974,586	13,765,173
Feb.	6,066,177	5,864,411	7,422,351	5,946,346	8,316,189	7,243,972
Mar.	5,276,655	5,524,568	8,118,107	7,165,011	7,894,397	7,344,396
April	5,639,755	6,991,570	8,360,025	8,132,445	9,227,331	8,573,146
May,	6,357,399	8,150,482	8,959,113	8,700,736	11,801,075	10,722,336
June,	6,323,849	5,082,039	9,322,038	7,432,008	11,295,483	10,943,162
July,	6,191,046	3,877,423	6,684,645	8,332,852	12,051,833	10,381,308
Aug.	5,352,812	2,699,855	6,599,917	7,027,790	7,833,889	7,235,581
Sept.	5,296,037	7,275,730	5,380,628	5,702,340	5,387,077	6,648,030
Oct.	5,218,966	12,505,692	6,663,770	7,252,879	7,773.492	7,987,244
Nov.	5,471,649	13,774,976	6,132,207	7,750,398	9,351,401	8,313,654
Dec.	6,969,662	9,839,329	7,494,569	9,685,659	12,583,899	10,395,345

No 30.—EXPENSES INCURRED IN THE REDEMPTION OF NATIONAL BANK NOTES AND ASSESSMENTS ON NATIONAL BANKS.

Fiscal year	Charges for transportation	Salaries	Contingent expenses, stationery, etc.	Total	Rate of assessment per $1,000	Assessment for cost of plates	Assessment for examiners' fees
1875	$ 88,098.31	$158,227.39	$44,639.67	$290,965.37	$2.2326	....	....
1876	159,142.84	188,018.94	18,031.53	365,193.31	2.07352	....	....
1877	189,362.05	150,695.68	17,008.37	357,066.10	1.66572	....	....
1878	173,420.60	136,580.63	7,941.25	317,942.48	1.56301	....	....
1879	98,298.75	133,956.27	8,694.93	240,949.95	1.58	....	....
1880	34,764.24	104,350.08	4,614.07	143,728.39	2.62098	....	....
1881	33,843.86	89,564.72	2,803.54	126,212.12	2.6942	....	....
1882	39,203.31	87,593.56	2,732.51	129,529.38	1.80416	....	....
1883	57,190.86	86,213.35	4,188.06	147,592.27	1.55634	$60,100	$94,606.16
1884	68,684.11	88,426.79	3,785.75	160,896.65	1.31978	20,795	99,642.05
1885	85,255.48	93,371.82	3,229.86	181,857.16	1.257	110,950	107,781.73
1886	74,490.52	89,065.18	4,687.65	168,243.35	1.3091	39,635	107,272.83
1887	48,020.53	87,450.54	3,495.93	138,967.00	1.58644	20,600	110,219.88
1888	51,529.76	86,232.40	3,379.32	141,141.48	1.52297	18,000	121,777.86
1889	42,413.56	85,974.55	2,802.56	131,190.67	1.4549	12,775	130,725.79
1890	19,862.65	83,841.30	4,139.44	107,843.39	1.5616	24,900	136,772.71
1891	18,536.54	78,989.85	1,840.13	99,366.52	1.52757	25,775	138,969.39
1892	19,305.54	77,131.13	4,157.03	100,593.70	1.46339	23,800	161,983.68
1893	23,231.70	77,840.12	1,961.14	103,032.96	1.35518	19,425	162,444.59
1894	24,271.41	77,790.01	5,383.72	107,445.14	1.06599	8,425	251,966.79
1895	21,035.82	76,411.97	2,905.00	100,352.79	1.15	11,825	238,252.27
1896	32,518.93	77,766.54	3,800.16	114,085.63	1.125	9,200	237,803.51
1897	44,518.50	77,977.62	2,565.61	125,061.73	1.0701	4,750	222,858.92
Total,	1,446,999.87	2,293,470.44	158,787.23	3,899,257.54	....	410,955	2,306,336.31

No. 31.—AVERAGE AMOUNTS OF NATIONAL BANK NOTES REDEEMABLE OUT OF THE FIVE PER CENT. REDEMPTION FUND, AND AMOUNTS REDEEMED, BY FISCAL YEARS.

Fiscal year	Average amount redeemable	Redeemed			Total received for redemption[1]
		Fit for use	Unfit for use	Total	
1875........	$341,227,987	$26,166,291	$115,109,445	$141,275,736	$155,521,000
1876........	323,508,340	102,478,700	78,643,155	181,121,855	209,039,000
1877........	303,056,663	151,070,300	62,518,600	213,588,900	242,885,000
1878........	307,342,754	152,437,300	51,585,400	204,022,700	213,152,000
1879........	313,696,846	112,411,800	40,204,700	152,616,500	157,657,000
1880........	323,309,058	24,980,500	29,861,700	54,842,200	61,586,000
1881........	319,577,199	6,763,600	40,080,700	46,844,300	59,650,000
1882........	327,964,886	3,801,500	53,838,500	57,640,000	76,089,000
1883........	321,292,597	15,572,100	59,875,000	75,447,100	102,700,000
1884........	311,358,660	26,255,500	72,260,700	98,516,200	126,152,000
1885........	288,915,938	45,634,800	72,669,700	118,304,500	150,209,000
1886........	270,047,283	46,701,100	54,532,935	101,234,035	130,296,000
1887........	211,731,998	20,786,640	30,506,030	51,292,670	87,690,000
1888........	166,411,545	17,453,780	25,843,765	43,297,545	99,152,000
1889........	147,669,610	17,084,590	27,443,340	44,527,930	88,932,000
1890........	129,575,073	12,590,880	23,275,005	35,865,885	70,257,000
1891........	126,571,607	12,543,220	27,494,445	40,037,665	67,461,000
1892........	138,083,516	16,676,700	36,282,335	52,959,035	69,625,000
1893........	150,030,040	24,166,150	43,394,418	67,560,568	75,845,000
1894........	179,120,846	39,893,840	50,944,080	90,837,920	105,331,000
1895........	179,668,009	35,055,620	40,094,540	75,150,160	86,709,000
1896........	194,527,575	46,946,190	43,866,375	90,812,565	108,261,000
1897........	211,375,647	37,659,960	69,014,688	106,674,648	113,574,000
Total...	....	995,131,061	1,149,339,556	2,144,470,617	2,657,773,000

[1] On failed, reducing and liquidating accounts as well as the five per cent. redemption fund.

No. 32.—NATIONAL BANK NOTES RECEIVED FOR REDEMPTION FROM PROMINENT CITIES AND OTHER PLACES, BY FISCAL YEARS.

	1877	1894	1895	1896	1897
New York.. ...	$ 76,693,000	$ 62,790,000	$ 51,936,000	$ 58,051,000	$ 65,312,000
Boston	75,212,000	14,255,000	10,266,000	14,613,000	16,382,000
Philadelphia....	20,988,000	6,094,000	6,099,000	7,601,000	8,348,000
Baltimore	1,821,000	1,092,000	952,000	2,068,000	1,610,000
Chicago	4,162,000	4,130,000	4,028,000	5,778,000	5,431,000
Cincinnati......	2,781,000	2,560,000	1,705,000	3,112,000	1,584,000
St. Louis	1,292,000	1,102,000	1,731,000	3,836,000	2,172,000
New Orleans ...	185,000	464,000	389,000	1,062,000	575,000
Other places....	59,751,000	12,844,000	9,603,000	12,140,000	12,160,000
Total.....	242,885,000	105,331,000	86,709,000	108,261,000	113,574,000

No. 33.—DEPOSITS AND SURPLUS RESERVES OF NEW YORK CLEARING HOUSE BANKS ON OR ABOUT THE FIRST OF EACH MONTH.

	1895		1896		1897	
	Deposits	Surplus Reserves	Deposits	Surplus Reserves	Deposits	Surplus Reserves
January................	$549,291,400	$35,268,850	$501,089,300	$15,939,675	$530,785,000	$33,286,950
February....	546,965,200	36,751,500	490,447,200	39,623,400	563,331,800	59,148,250
March...............	528,440,800	28,054,500	489,612,200	24,442,150	573,769,300	57,520,975
April..................	504,240,200	13,413,450	481,795,700	17,005,975	569,226,500	47,666,575
May....................	526,998,100	27,233,575	495,004,100	22,944,275	576,863,900	48,917,625
June...................	566,229,400	41,221,250	498,874,100	22,230,675	575,600,000	46,616,100
July...................	570,436,300	34,225,925	499,046,900	20,328,275	604,983,700	41,384,875
August................	574,304,500	40,917,175	485,014,000	17,728,600	623,045,000	45,720,150
September.............	574,929,900	39,149,925	451,934,800	8,836,200	636,996,000	39,517,700
October................	549,136,500	22,296,175	454,733,100	16,526,025	619,353,200	15,550,400
November..............	529,862,400	17,594,400	446,445,900	17,463,225	625,339,000	24,271,800
December...............	520,788,000	18,613,300	490,634,300	31,411,625	666,278,600	22,122,950

No. 34.—STATEMENT SHOWING VALUATION UPON A THREE PER CENT. BASIS OF OUTSTANDING GOVERNMENT BONDS.

[Prepared by the Government Actuary.]

Date	4 % bonds of 1925.	4 % bonds of 1907.	5 % bonds of 1904.
	Prices at which 3 % interest on investment will be realized February 1	Prices at which 3 % interest on investment will be realized July 1	Prices at which 3 % interest on investment will be realized February 1
1898...........................	118.4598	107.8618	110.9446
1899...........................	118.0086	107.0889	109.2540
1900...........................	117.5436	106.2927	107.5121
1901...........................	117.0646	105.4723	105.7174
1902...........................	116.5710	104.6270	103.8683
1903...........................	116.0625	103.7561	101.9630
1904...........................	115.5385	102.8587	....
1905...........................	114.9986	101.9341	....
1906...........................	114.4423	100.9815	....
1907...........................	113.8692	....	....
1908...........................	113.2787	....	....
1909...........................	112.6702	....	....
1910...........................	112.0433	....	....

No. 35.—TRANSACTIONS OF NEW YORK CLEARING HOUSE FOR FORTY-FOUR YEARS.

[Report Comptroller of the Currency, 1897, p. 550.]

Year	No. of banks	Capital *a*	Clearings	Balances paid in money	Average daily clearings	Average daily balances paid in money	Balances to clearings
							Per cent.
1854	50	$47,044,900	$ 5,750,455,987	$ 297,411,494	$ 19,104,505	$ 988,078	5.2
1855	48	48,884,180	5,362,912,098	289,694,137	17,412,052	940,565	5.4
1856	50	52,883,700	6,906,213,328	334,714,489	22,278,108	1,079,724	4.8
1857	50	64,420,200	8,333,226,718	365,313,902	26,968,371	1,182,246	4.4
1858	46	67,146,018	4,756,664,386	314,238,911	15,393,736	1,016,954	6.7
1859	47	67,921,714	6,448,005,956	363,984,683	20,867,333	1,177,944	5.6
1860	50	69,907,435	7,231,143,057	380.693,438	23,401,757	1,232,018	5.3
1861	50	68,900,605	5,915,742,758	353,383,944	19,269,520	1,151,088	6.0
1862	50	68,375,820	6,871,443,591	415,530,331	22,237,682	1,344,758	6.0
1863	50	68,972,508	14,867,597,849	677,626,483	48,428,657	2,207,252	4.6
1864	49	68,586,763	24,097,196,656	885,719,205	77,984,455	2,866,405	3.7
1865	55	80,363,013	26,032,384,342	1,035,765,108	84,796.040	3,373,828	4.0
1866	58	82,370,200	28,717,146,914	1,066,135,106	93,541,195	3,472,753	3.7
1867	58	81,770,200	28,675,159,472	1,144,963,451	93,101,167	3,717,414	4.0
1868	59	82,270,200	28,484,288,637	1,125,455,237	92,182,164	3,642,250	4.0
1869	59	82,720,200	37,407,028,987	1,120,318,308	121,451,393	3,637,397	3.0
1870	61	83,620,200	27,804,539,406	1,036,484,822	90,274,479	3,365,210	3.7
1871	62	84,420,200	29,300,986,682	1,209,721,029	95,133,074	3,927,666	4.1
1872	61	84,420,200	33,844,369,568	1,428,582.707	109,884,317	4,638,256	4.2
1873	59	83,370,200	35,461,052,826	1,474,508,025	115,885,794	4,818,654	4.1
1874	59	81,635,200	22,855,927,636	1,286,753,176	74,698,574	4,205,076	5.6
1875	59	80,435,200	25,061,237,902	1,408,608,777	81,899,470	4,603,297	5.6
1876	59	81,731,200	21,597,274,247	1,295,042,029	70,349,428	4.218,378	6.0
1877	58	71,085,200	23,289,243,701	1,373,996,302	76,358,176	4,504,906	5.9
1878	57	63,611,500	22,508,438,442	1,307,843,857	73,785,747	4,274,000	5.8
1879	59	60,800,200	25,178,770,691	1,400,111,063	82,015,540	4,560,622	5.6
1880	59	60.475,200	37,182,128,621	1,516,538,631	121,510,224	4,956,009	4.1
1881	61	61,162,700	48,565,818,212	1,776,018,162	159,232,191	5,823,010	3.6
1882	62	60,962,700	46,552,846,161	1,595,000,245	151,637,935	5,195,440	3.4
1883	64	61,162,700	40,293,165,258	1,568,983,196	132,543,307	5,161,129	3.9
1884	62	60,412,700	34,092,037,338	1,524,930,994	111,048,982	4,967,202	4.5
1885	64	58,612,700	25,250,791,440	1,295,355,252	82,789,480	4,247.069	5.1
1886	64	59,312,700	33,374,682,216	1,519,565,385	109,067,589	4,965,900	4.6
1887	65	60,862,700	34,872,848,786	1,569,626,325	114,337,209	5,146,316	4.5
1888	64	60,762,700	30,863,686,609	1,570,198,528	101,192,415	5,148,192	5.1
1889	64	60,762,700	34,796,465,529	1,757,637,473	114,839,820	5,800,784	5.0
1890	65	60,812,700	37,660,686,572	1,753,040,145	123,074,139	5,728,889	4.7
1891	64	60,772,700	34,053,698,770	1,584,635,500	111,651,471	5,105,526	4.6
1892	65	60,422,700	36,279,905,236	1,861,500,575	118,561,782	6,083,335	5.1
1893	65	60,922,700	34,421,380,870	1,696,207,176	113,978,082	5,616,580	4.9
1894	66	61,622,700	24,230,145,368	1,585,241,634	79,704,426	5,214,611	6.5
1895	67	62,622,700	28,264,379,126	1,896.574,349	92,670,095	6,218,277	6.71
1896	66	60,622,700	29,350,894,884	1,843,289,239	96,232,442	6,043,571	6.3
1897	66	59,022,700	31,337,760,948	1,908,901,898	103,424,954	6,300,006	6.01
Total	....	*b*67,467,400	*c*1,134,201,773,780	*c*53,215,844,719	*b*84,127,116	*b*3,947,177	4.69

a The capital is for various dates, the amounts at a uniform date in each year not being obtainable.
b Yearly average for forty-four years. *c* Totals for forty-four years.

No. 36.—CLEARING HOUSE EXCHANGES FOR YEARS ENDING SEPT. 30, 1882–1897.

Year	New York	Boston	Philadelphia	Chicago	Total for U. S.
1882	46,552,846,161	3.753,496,901	2,760,946,905	2,373,903,487	61,054,353,584
1883	40,293,165,258	3,540,980,659	2,794,181,748	2,507,022,178	53,536.061,332
1884	34,092,037,338	3,314,358,919	2,664,317,901	2,349,152,846	47,387,408,275
1885	25,250,791,440	3,365,702,730	2,244,194,406	2,248,230,189	37,770,110,819
1886	33,374,682,216	4,008,565,266	2,785,875,450	2,560,369.272	48,211,643,771
1887	34,872,848,786	4,408,269,993	3,186,188,935	2,887,276,059	52.126,704,488
1888	30,863,686,609	4,288,878,016	3,155,190,237	3,089,288,194	48,651,654,957
1889	34,796,465,529	4,758,029,298	2,663,592,024	3,327,108,659	53,501,411,510
1890	37,660,686,572	5,102,281,307	2,755,523.735	3,907,046,008	58,845,279,505
1891	34,053,698,770	4,795,594,052	4,338,693,169	3,372,915.551	57,181,347,284
1892	36,279,905,236	4,901,096,976	4,959,861,142	3.671,149,047	61,017,839,067
1893	34,421,379,870	4,864,779.750	4,970,913,387	3,656,677,140	58,880,682,455
1894	24,230,145,368	4,095,995,060	4,263,560.459	2.962.542,206	45,028,496.746
1895	28,264,379,126	4,629,303,920	4,541,435,624	3,395,864,543	51,111,591,928
1896	29,350,894,884	4,554,116.109	4,538,505,883	3.383.903.806	51,977,709.114
1897	31,337,760,948	4,952,927,911	4,318,121.413	3,100,510,779	54,030,253.695

No. 37.—DISTRIBUTION OF SILVER DOLLARS AT THE END OF EACH FISCAL YEAR.

July 1	Dollars in circulation	Represented by certificates in circulation	Net silver dollars in the Treasury	Total silver dollars coined to date
1878	$ 855,143	$ 7,080	$ 7,711,277	$ 8,573,500
1879	7,653,649	414,480	27,732,871	35,801,000
1880	19,309,435	5,789,569	38,635,746	63,734,750
1881	28,827,983	39,110,729	23,433,993	91,372,705
1882	31,990,964	54,506,090	32,647,726	119,144,780
1883	35,341,880	72,620,686	39,293,333	147,255,899
1884	39,794,913	96,427,011	39,133,905	175,355,829
1885	38,471,269	101,530,946	63,882,166	203,884,381
1886	52,469,720	88,116,225	93,137,341	233,723,286
1887	55,506,147	142,118,017	69,365,953	266,990,117
1888	55,545,303	200,387,376	43,776,111	299,708,790
1889	54,417,967	257,102,445	21,982,238	333,502,650
1890	56,166,356	297,210,043	16,050,067	369,426,466
1891	57,683,041	307,364,148	16,820,239	405,659,268
1892	56,799,484	326,880,803	6,909,978	413,988,735
1893	57,029,743	326,489,165	6,357,936	419,332,450
1894	51,191,377	327,094,381	15,221,619	419,333,208
1895	51,983,162	319,731,752	29,344,617	423,289,219
1896	52,175,998	331,259,509	37,195,930	430,790,041
1897	52,001,202	358,336,368	30,589,515	451,993,742
Dec. 31, 1897	61,491,073	376,695,592	12,686,909	455,818,122

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